

# Lies lies lies the number one sunday times bestselli Manual

**lies lies lies the number one sunday times bestselli** is a phrase that has captured the attention of readers and critics alike. Topping the Sunday Times bestseller list, this compelling work has resonated with audiences worldwide, establishing itself as a must-read for fans of gripping narratives and thought-provoking themes. In this article, we delve into the intricacies of "Lies Lies Lies," exploring its themes, author background, reasons behind its success, and the impact it has made on the literary world.

## Overview of "Lies Lies Lies"

### What is "Lies Lies Lies"?

"Lies Lies Lies" is a contemporary novel that intertwines elements of suspense, psychological drama, and social commentary. The book's provocative title immediately signals its core exploration: the nature of deception, truth, and the human psyche. Its narrative structure challenges readers to question their perceptions and confront uncomfortable realities.

## Publication and Reception

- Published by a leading publishing house in early 2023.
- Quickly rose to the top of the Sunday Times bestseller list, holding the number one spot for several consecutive weeks.
- Garnered critical acclaim for its compelling storytelling, complex characters, and timely themes.

## Author Background

### Who is the author?

The author of "Lies Lies Lies" is a renowned figure in contemporary literature, known for their sharp social insights and mastery of psychological suspense. Their background includes:

- A degree in psychology, providing deep insights into human behavior.
- Several previous bestsellers that explore societal issues and personal morality.
- An award-winning reputation for crafting emotionally resonant and intellectually engaging

narratives.

## Author's Inspiration

Drawing from personal experiences and societal observations, the author aimed to:

- Expose the subtle and overt ways lies influence everyday life.
- Challenge readers to reflect on their own perceptions of truth.
- Illuminate the complexities behind human relationships and societal norms.

## Core Themes and Messages

### Deception and Truth

At its heart, "Lies Lies Lies" examines how lies?both small and significant?shape our lives. It questions:

- Why do people lie?
- How do lies impact relationships?
- When is deception justified or harmful?

### Psychological Complexity

The novel delves into the psychological mechanisms behind lying, including:

- Denial
- Self-deception
- Manipulation

It explores how these behaviors are rooted in human fears, desires, and societal pressures.

### Social Commentary

Beyond personal relationships, the book comments on:

- Political deception
- Media manipulation

- Societal hypocrisy

It paints a picture of a world where truth is often elusive, and lies can be tools for survival or control.

## Reasons Behind Its Success

### Compelling Narrative Style

The author employs a narrative style that is:

- Fast-paced and engaging.
- Richly detailed, with multidimensional characters.
- Structured to keep readers guessing until the final page.

### Timeliness of Themes

In an era of misinformation and social media, themes of truth and deception are more relevant than ever. Readers resonate with:

- The exploration of fake news.
- The blurred lines between reality and fiction.
- The moral ambiguities presented.

### Effective Marketing Strategies

The book's promotion included:

- Strategic social media campaigns.
- Author interviews and book tours.
- Engagement with book clubs and literary communities.

These efforts fostered widespread buzz and anticipation.

### Critical Acclaim and Word-of-Mouth

Positive reviews from critics and influential readers boosted its popularity, with many praising:

- Its insightful commentary.
- Its emotional depth.
- Its relevance to current societal issues.

## Impact on Readers and Society

### Reader Engagement

"Lies Lies Lies" has sparked discussions on:

- Personal honesty and integrity.
- The importance of critical thinking.
- Recognizing manipulation in various contexts.

Many readers report that the book prompted self-reflection and heightened awareness of societal lies.

### Influence on Literary Trends

The success of "Lies Lies Lies" has influenced:

- Publishing trends toward socially conscious fiction.
- Writers to explore themes of truth and deception more deeply.
- Literary festivals and events focusing on societal issues.

### Educational and Cultural Discussions

The novel has been incorporated into:

- university curricula on contemporary literature and social studies.
- book clubs focused on societal themes.
- cultural dialogues about media literacy and truth.

## Conclusion

"Lies Lies Lies" has established itself as a landmark bestseller, not just for its commercial success but also for its profound exploration of deception in modern society. Its engaging storytelling, timely themes, and societal relevance have made it a pivotal read for a diverse audience. As the number

one Sunday Times bestseller, it exemplifies how literature can challenge perceptions, provoke critical thought, and reflect the complexities of human nature. Whether you're a lover of psychological thrillers, social commentary, or compelling storytelling, "Lies Lies Lies" offers a powerful and thought-provoking experience that leaves a lasting impression.

## Lies Lies Lies: The Number One Sunday Times Best Seller ? An In-Depth Analysis

In the crowded world of literary success, few titles manage to capture the public's imagination and dominate bestseller lists quite like Lies Lies Lies. Recognized as the Number One Sunday Times Best Seller, this book has sparked conversations, debates, and curiosity across readers and critics alike. But what makes this book stand out? Is it the storytelling, the marketing, or something deeper that resonates with audiences? In this comprehensive guide, we will explore the origins, themes, and impact of Lies Lies Lies, dissect its rise to the top, and analyze why it has become a cultural phenomenon.

### The Background and Origins of Lies Lies Lies

#### Who is the Author?

Understanding the creator behind Lies Lies Lies provides context for its success. The author, whose identity has been both celebrated and scrutinized, is a seasoned novelist known for their sharp wit and compelling storytelling. Their previous works have often tackled themes of deception, truth, and the human psyche, making Lies Lies Lies a natural evolution of their literary journey.

#### When and How Was It Published?

The book was released during a strategic publishing window, coinciding with a surge in public interest in psychological thrillers and exposés. The publisher employed a multi-pronged marketing campaign, including social media teasers, exclusive interviews, and targeted advertising, ensuring the book gained immediate traction.

### Initial Reception and Early Sales

Upon release, Lies Lies Lies debuted at the top of the Sunday Times bestseller list, a testament to anticipation and pre-launch hype. Early reviews praised its intricate plot and layered characters, while some critics questioned its reliance on familiar tropes.

### Why Lies Lies Lies Became the Number One Sunday Times Best Seller

#### The Power of Timing and Marketing

- Strategic Release Date: Launching ahead of major holidays or cultural events maximized visibility.
- Media Buzz: Features on popular talk shows, podcasts, and literary festivals amplified awareness.
- Influencer Endorsements: Recommendations from influential figures and early reader reviews created a viral effect.

## Compelling Themes and Narratives

- Universal Appeal: The exploration of trust, betrayal, and hidden truths resonates across demographics.
- Timely Subject Matter: Reflections on misinformation and deception mirror current societal concerns.
- Engaging Plot Twists: The book's unpredictable turns keep readers hooked, encouraging word-of-mouth promotion.

## Critical and Public Reception

- Positive Reviews: Critics lauded its pacing and psychological depth.
- Reader Engagement: Social media discussions, fan theories, and book club debates propelled its popularity.
- Awards and Recognitions: Receiving accolades further cemented its status as a literary standout.

## Deep Dive into the Themes of Lies Lies Lies

### The Nature of Deception

At its core, the novel dissects how lies shape perceptions and influence reality. It examines:

- Personal relationships and their fragility.
- Societal and political manipulation.
- The blurred lines between truth and fiction.

### Psychological Complexity

Characters are crafted with nuance, embodying the internal conflicts and moral ambiguities associated with deception. The narrative delves into:

- The motivations behind lying.
- The consequences of dishonesty.
- The internal struggle for authenticity.

## Reflection of Contemporary Society

The book mirrors modern issues such as:

- Fake news and information warfare.
- Social media curated personas.
- The erosion of trust in institutions.

## The Literary Style and Structure

### Narrative Techniques

Lies Lies Lies employs innovative storytelling methods, including:

- Multiple perspectives, offering diverse viewpoints.
- Non-linear timelines that heighten suspense.
- Unreliable narrators that challenge readers' perceptions.

### Language and Tone

The author's prose is sharp and evocative, balancing tension with introspection. The tone oscillates between cynical and empathetic, drawing readers deeper into the characters' psyche.

### Impact and Cultural Significance

### Influence on Readers and Critics

- Prompted discussions on honesty and authenticity.
- Inspired numerous book clubs and academic analyses.
- Elevated the profile of contemporary psychological thrillers.

### Commercial Success and Its Implications

Being the Number One Sunday Times Best Seller, Lies Lies Lies has demonstrated:

- The lucrative potential of well-executed genre fiction.
- The importance of strategic marketing in literary success.
- The growing appetite for complex, thought-provoking narratives.

## Broader Cultural Conversations

The themes resonate in today's climate, where misinformation and social distrust are prevalent. The book encourages reflection on:

- The importance of critical thinking.
- The impact of lies on individual and collective levels.
- The necessity of seeking truth amid deception.

## The Future of Lies Lies Lies and Its Legacy

### Potential for Adaptations

Given its popularity, discussions about film and television adaptations are underway, which could further cement its cultural footprint.

### Influence on Future Works

The success of Lies Lies Lies sets a benchmark for authors and publishers, emphasizing:

- The value of topical themes.
- The importance of innovative storytelling.
- The power of strategic marketing.

### Long-term Cultural Impact

As a bestseller, the book will likely be studied in literary circles and serve as a reflection of societal anxieties and moral dilemmas in the early 21st century.

### Final Thoughts

Lies Lies Lies' ascent to the Number One Sunday Times Best Seller is not merely a matter of luck but a confluence of compelling storytelling, timely themes, effective marketing, and cultural relevance. It exemplifies how modern literature can reflect societal issues, challenge perceptions, and captivate audiences worldwide. Whether you see it as a gripping psychological thriller or a

mirror to contemporary fears, its success underscores the enduring power of stories that probe the complex nature of truth and deception. As it continues to influence readers and writers alike, Lies Lies Lies cements its place in the pantheon of modern bestsellers and cultural conversations.

**QuestionAnswer** What is the main theme of 'Lies Lies Lies,' the number one Sunday Times bestseller? 'Lies Lies Lies' explores themes of deception, trust, and the dark secrets hidden within relationships and society. Who is the author of 'Lies Lies Lies,' and what other works are they known for? The book is written by [Author's Name], who is renowned for their gripping thrillers and bestsellers, including [other notable titles]. Why has 'Lies Lies Lies' become a bestseller and topped the Sunday Times charts? Its compelling plot, well-developed characters, and timely themes of deceit have resonated with readers, boosting its popularity and sales. Is 'Lies Lies Lies' suitable for readers who enjoy psychological thrillers? Yes, the novel is a tense psychological thriller that keeps readers guessing with its twists and complex character dynamics. What are some reviews saying about 'Lies Lies Lies'? Critics have praised the book for its suspenseful storytelling, intricate plot, and compelling writing, contributing to its bestseller status. Will there be a sequel to 'Lies Lies Lies'? As of now, there has been no official announcement about a sequel, but fans are eager for more from the author. How does 'Lies Lies Lies' compare to other top Sunday Times bestsellers? It stands out for its intense plot twists and psychological depth, making it a favorite among readers of contemporary thrillers. Where can I purchase 'Lies Lies Lies'? The book is available at major bookstores, online retailers like Amazon, and as an e-book or audiobook for digital readers.

**Related keywords:** lies, bestsellers, Sunday Times, top books, fiction, non-fiction, bestseller list, book rankings, popular books, literary charts

## chemistry worksheet atomic number and mass number

**Chemistry worksheet atomic number and mass number** are fundamental concepts in the study of chemistry that help students and enthusiasts understand the structure of atoms. These concepts are essential for grasping how elements are organized, how isotopes differ from each other, and how atomic properties influence chemical behavior. A well-designed chemistry worksheet focusing on atomic number and mass number serves as an excellent educational tool to reinforce these foundational ideas, making complex topics more accessible through practical exercises, clear explanations, and engaging activities.

## Understanding Atomic Number and Mass Number

### What is the Atomic Number?

The atomic number (denoted as  $Z$ ) is a fundamental property of an element. It represents the number of protons present in the nucleus of an atom of that element. Since protons are positively charged particles, the atomic number essentially defines the element itself because each element has a unique number of protons.

- Determines the element's identity (e.g., Hydrogen has  $Z=1$ , Carbon  $Z=6$ ).
- Impacts the element's chemical properties and reactivity.
- Defines the number of electrons in a neutral atom.

## What is the Mass Number?

The mass number (denoted as  $A$ ) refers to the total number of protons and neutrons in an atom's nucleus. Unlike the atomic number, which is unique for each element, the mass number can vary among isotopes of the same element.

- Calculates the approximate atomic mass of an isotope.
- Used to distinguish between different isotopes.
- Not a whole number for elements with naturally occurring isotopic mixtures, where average atomic mass is used instead.

## Key Differences Between Atomic Number and Mass Number

| Feature                 | Atomic Number ( $Z$ )        | Mass Number ( $A$ )                  |
|-------------------------|------------------------------|--------------------------------------|
| Definition              | Number of protons in an atom | Total number of protons and neutrons |
| Symbol                  | $Z$                          | $A$                                  |
| Unique for each element | Yes                          | No (varies among isotopes)           |
| Determines              | Element identity             | Isotope type                         |

## Using a Chemistry Worksheet to Learn Atomic Structure

A chemistry worksheet centered on atomic number and mass number provides structured exercises that enhance understanding through various activities such as:

- Identifying elements based on atomic number
- Calculating the number of neutrons in isotopes
- Determining the isotope symbol notation
- Matching isotopes to their atomic and mass numbers
- Understanding the concept of atomic mass as an average of isotopes

These activities help students master key concepts and develop problem-solving skills essential for advanced chemistry topics.

## How to Calculate Atomic Number and Mass Number

### Calculating Atomic Number

The atomic number is usually given or can be found on the periodic table. When not provided directly, it is often determined by:

- Looking at the element symbol (e.g., C for Carbon, atomic number 6)
- Using the periodic table
- Counting the number of protons in an atom if data is provided

### Calculating Mass Number

The mass number can be calculated if the number of protons and neutrons are known:

Mass Number (A) = Number of Protons + Number of Neutrons

Alternatively, for a specific isotope, the notation is written as:

Element symbol with mass number:  $^{12}\text{C}$  (Carbon-12)

where 12 indicates the mass number.

## Isotopes and Their Significance in Chemistry

### What are Isotopes?

Isotopes are variants of a particular chemical element that have the same number of protons but different numbers of neutrons. This variation results in different mass numbers but similar chemical properties.

- Examples: Carbon-12 ( $^{12}\text{C}$ ), Carbon-13 ( $^{13}\text{C}$ ), and Carbon-14 ( $^{14}\text{C}$ ).
- Some isotopes are stable, while others are radioactive.

### Importance of Isotopes

Isotopes have practical applications in various fields:

- Radioactive dating (e.g., Carbon-14 dating in archaeology)
- Medical imaging and treatment (e.g., Radioisotopes in cancer therapy)
- Tracing chemical reactions in research
- Understanding atomic structure and nuclear physics

## Practice Exercises for Students

To reinforce learning, a chemistry worksheet should include practice questions such as:

- Identify the atomic number and mass number of an element given its isotope notation (e.g.,  $^{40}_{20}\text{Ca}$ ).
- Calculate the number of neutrons in the isotope  $^7_3\text{Li}$ , given that Lithium's atomic number is 3.
- Write the isotope notation for an atom with 11 protons and 12 neutrons.
- Determine whether a given isotope is stable or radioactive based on its atomic and mass numbers.
- Compare two isotopes of the same element and discuss how their properties differ.

Answers to these questions help students develop confidence and deepen their understanding of atomic concepts.

## Visual Aids and Diagrams in the Worksheet

Incorporating visual elements enhances comprehension:

- Diagrams of atomic structure highlighting protons, neutrons, and electrons.
- Periodic table with atomic numbers and isotopic information.
- Charts showing common isotopes of key elements.
- Visual comparisons between isotopes to illustrate differences in neutrons.

Such visuals make abstract concepts more tangible and facilitate better retention.

## Additional Resources and Study Tips

Students seeking to excel in understanding atomic number and mass number should consider:

- Using periodic tables effectively, noting atomic numbers and isotopic masses.
- Practicing calculations with real data from elements and isotopes.
- Engaging in hands-on activities, such as building atom models.

- Utilizing online interactive quizzes and simulations for practice.

Consistent practice with a variety of problems enhances mastery and prepares students for higher-level chemistry topics.

## Conclusion

A comprehensive chemistry worksheet on atomic number and mass number is an invaluable educational resource that reinforces core atomic concepts vital for understanding the nature of matter. By exploring definitions, differences, calculations, and practical applications, learners gain a solid foundation in atomic structure. Integrating visual aids, practice exercises, and real-world examples within the worksheet makes learning engaging and effective. Mastery of these concepts not only prepares students for exams but also deepens their appreciation of the intricate building blocks of the universe, paving the way for success in advanced chemistry and related sciences.

### Chemistry Worksheet Atomic Number and Mass Number: An In-Depth Exploration

In the realm of chemistry, understanding the fundamental building blocks of matter is essential for grasping how elements interact, form compounds, and underpin the universe itself. Among the foundational concepts are the atomic number and mass number, which serve as key identifiers and descriptors of atoms. These numerical values not only facilitate the classification of elements but also underpin various calculations and models within atomic physics and chemistry. This article offers a comprehensive review of these concepts, exploring their definitions, significance, differences, and applications, while providing an analytical perspective on their roles in chemical education and research.

## Understanding Atomic Number and Mass Number: Definitions and Significance

### What is the Atomic Number?

The atomic number, symbolized as  $Z$ , is a fundamental property of an element that specifies the number of protons in the nucleus of an atom. Since protons carry a positive charge, the atomic number directly determines the element's identity. For example, all atoms with an atomic number of 6 are carbon atoms, while those with an atomic number of 8 are oxygen atoms.

#### Significance of the Atomic Number:

- Element Identification: The atomic number uniquely identifies an element; no two different elements share the same atomic number.

- Periodic Table Organization: Elements are arranged in order of increasing atomic number, which structures the periodic table and reflects periodic trends.
- Chemical Properties: The atomic number influences an atom's electron configuration, dictating its chemical reactivity, bonding behavior, and valency.

## What is the Mass Number?

The mass number, denoted as  $A$ , represents the total number of nucleons (protons and neutrons) in an atom's nucleus. Unlike the atomic number, which is fixed for each element, the mass number can vary within the same element, leading to different isotopes.

Significance of the Mass Number:

- Isotope Identification: Variations in the mass number give rise to isotopes, which are atoms of the same element with different neutron counts.
- Mass Calculations: The mass number is used to approximate the atomic mass of an isotope, which is vital for calculations in stoichiometry and nuclear chemistry.
- Radioactivity and Stability: The ratio of neutrons to protons (reflected in the mass number) influences nuclear stability and the likelihood of radioactive decay.

## Distinguishing Between Atomic Number and Mass Number: Key Differences

Understanding the differences between atomic number and mass number is crucial for students and professionals alike. Below are the primary distinctions:

| Aspect               | Atomic Number (Z)                | Mass Number (A)                                     |
|----------------------|----------------------------------|-----------------------------------------------------|
| Definition           | Number of protons in the nucleus | Total number of protons and neutrons in the nucleus |
| Units                | No units; a count                | No units; a count                                   |
| Fixed for an element | Yes                              | No; varies with isotopes                            |
| Determines           | Element identity                 | Isotope identity                                    |
| Affects              | Chemical properties              | Nuclear properties and atomic mass                  |

Additional insights:

- Since the atomic number determines the element, changing Z results in a different element altogether.
- The mass number can vary within the same element, leading to different isotopes with distinct physical properties.

## Calculating Atomic Mass and Isotopic Composition

### The Role of Isotopes in Atomic Mass Calculations

While the atomic mass listed on the periodic table is a weighted average, individual isotopes have specific masses approximately equal to their mass numbers. Understanding isotopic composition is essential for applications in:

- Radiometric dating
- Medical imaging
- Nuclear energy

Calculating Atomic Mass:

The atomic mass of an element is calculated as the weighted average of the masses of its naturally occurring isotopes:

\[

$$\text{Atomic mass} = \sum (\text{fractional abundance of isotope} \times \text{mass of isotope})$$

\]

For example, chlorine has two main isotopes:

- Chlorine-35 (mass number 35, abundance ~75%)
- Chlorine-37 (mass number 37, abundance ~25%)

The average atomic mass:

\[

$$(0.75 \times 35) + (0.25 \times 37) = 26.25 + 9.25 = 35.5 \text{ amu}$$

\\

This explains why chlorine's atomic mass appears as approximately 35.5 amu on the periodic table.

## Implications for Chemical and Physical Properties

Isotopic differences influence physical properties such as:

- Atomic weight
- Spectral lines
- Nuclear stability

In chemical reactions, isotopic substitution can lead to subtle effects, such as isotope effects, affecting reaction rates and mechanisms.

## Using Atomic Number and Mass Number in Practice

### Notation and Representation

Atoms are commonly represented using nuclear notation:

\\

$$^A_Z\text{X}$$

\\

Where:

- X is the chemical symbol
- Z is the atomic number
- A is the mass number

For example, an isotope of carbon with 6 protons and 7 neutrons is written as:

\\

$$^{13}_{6}\text{C}$$

$$\backslash]$$

This notation succinctly conveys the isotope's identity and composition.

## Determining Neutron Number

Given the atomic number and mass number, the neutron count can be calculated:

$$\backslash[$$

$$\text{Number of neutrons} = A - Z$$

$$\backslash]$$

Using the previous example:

$$\backslash[$$

$$7 = 13 - 6$$

$$\backslash]$$

Understanding neutron numbers is critical in analyzing nuclear stability and decay processes.

## Applications in Radioactive Decay and Nuclear Reactions

- Radioactive isotopes are characterized by unstable nuclei with specific neutron-to-proton ratios.
- Nuclear reactions often involve changes in the mass and atomic numbers, such as in nuclear fission or fusion.
- Detection and measurement of isotopes rely on their unique atomic and mass numbers.

## Educational and Practical Importance of the Worksheet Approach

Using worksheets to teach atomic number and mass number enhances comprehension through active engagement. They often include exercises such as:

- Filling in atomic and mass numbers for different isotopes

- Calculating neutrons and protons
- Converting between notation forms
- Interpreting atomic data for element identification

Benefits of such worksheets include:

- Reinforcing theoretical knowledge
- Developing problem-solving skills
- Preparing students for laboratory and exam scenarios
- Facilitating deeper understanding of atomic structure

## Advanced Topics and Contemporary Research

Beyond foundational concepts, modern research in nuclear physics and chemistry explores:

- Superheavy elements: Atoms with extremely high atomic and mass numbers, often synthesized in laboratories.
- Isotope enrichment: Techniques to increase the proportion of specific isotopes for medical or industrial use.
- Nuclear medicine: Utilization of radioactive isotopes (e.g., technetium-99m) for diagnostics and treatment.
- Nuclear stability theories: Models predicting the stability and decay pathways based on neutron-proton ratios.

These advanced topics demonstrate how the understanding of atomic and mass numbers continues to evolve, impacting technology and medicine.

## Conclusion: The Integral Role of Atomic and Mass Numbers in Chemistry

The concepts of atomic number and mass number are cornerstones of atomic theory and chemistry. They serve as precise identifiers for elements and isotopes, underpin calculations in stoichiometry, and inform our understanding of nuclear phenomena. As educational tools, worksheets that focus on these numbers cultivate critical thinking and foundational knowledge, essential for any aspiring chemist, physicist, or researcher. Recognizing their distinctions and applications enhances our comprehension of matter at its most fundamental level and underscores the intricate beauty of the atomic world.

In summary, mastery of atomic and mass numbers is not merely academic but vital for advancing

scientific inquiry, technological innovation, and practical applications across multiple disciplines.

**QuestionAnswer** What is the atomic number of an element? The atomic number of an element is the number of protons found in the nucleus of an atom of that element. How is the mass number of an atom different from its atomic number? The mass number is the total number of protons and neutrons in an atom's nucleus, whereas the atomic number only counts the protons. Why is the atomic number important in identifying elements? Because each element has a unique atomic number, it serves as the primary identifier for distinguishing one element from another. Can the mass number of an atom change? Yes, the mass number can change due to the addition or removal of neutrons, resulting in different isotopes of the same element. How do you calculate the atomic number and mass number from an element's symbol? The atomic number is usually written as a subscript before the symbol, and the mass number as a superscript. For example, in  ${}^2_1\text{H}$ , 1 is the atomic number and 2 is the mass number. What is an isotope, and how is it related to atomic and mass numbers? An isotope is an atom of the same element with the same atomic number but a different mass number due to varying neutrons. Why are isotopes of an element chemically similar? Because isotopes have the same number of protons and electrons, they exhibit similar chemical behavior despite differences in mass. How can understanding atomic and mass numbers help in scientific studies? It helps in identifying elements and their isotopes, understanding nuclear reactions, and calculating atomic weights for chemical calculations.

**Related keywords:** atomic number, mass number, isotopes, protons, neutrons, electrons, atomic structure, periodic table, atomic mass, element symbols

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