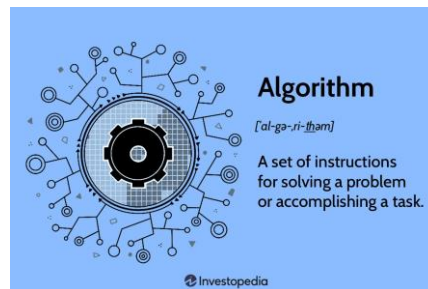


Text 1: Understanding Algorithms



What is an Algorithm?

An algorithm is a step-by-step procedure or set of rules designed to solve a specific problem or accomplish a particular task. Algorithms are essential in computer science because they provide the foundation for programming and data processing. For example, when you use a search engine, it follows an algorithm to find the most relevant results.

Types of Algorithms

There are many types of algorithms, each suited for different tasks. Some common examples include:

- **Sorting Algorithms:** Used to arrange data in a particular order, such as alphabetical or numerical.
- **Search Algorithms:** Designed to locate specific data within a dataset.
- **Graph Algorithms:** Applied to networks, such as social networks or transportation systems.

Reading Task: Algorithms in Everyday Life

Algorithms are not limited to computer science; they exist all around us. For instance, a recipe for cooking is an algorithm—it provides step-by-step instructions to create a dish. Similarly, when you follow a set of directions to reach a destination, you are using an algorithm. In computer science, these "real-world" algorithms are translated into code to automate tasks. For example, navigation apps like Google Maps use algorithms to calculate the fastest route from point A to point B, taking traffic and road conditions into account.

Why Are Algorithms Important?

Algorithms are the backbone of computer science. They help computers solve problems systematically and efficiently. Without algorithms, tasks like sorting emails, recommending movies, or encrypting data would not be possible. Furthermore, algorithms are used in fields beyond computing, such as biology (for DNA sequencing), economics (for stock market analysis), and logistics (for route optimization).

Comprehension Questions

I. Vocabulary

Find the meanings of the following terms and translate them into French:

- Algorithm
- Dataset
- Navigation
- Automate

II. True or False

- Algorithms are only used in computer programs.
- A recipe is an example of an algorithm in everyday life.
- Algorithms are essential for solving problems efficiently.

III. Open-ended Questions

- What is an algorithm, and why is it important?
- Provide two examples of algorithms used in daily life.
- Explain how navigation apps use algorithms to provide routes.

IV. Writing Task

Write a short paragraph (5–7 sentences) about an algorithm. Explain its purpose, how it works, and why it is important in computer science or programming.

Good luck !