1. How does a stack differ from a queue?
2. What is dynamic memory allocation in C, and why is it needed?
3. Describe how binary search operates.
4. In worst-case scenarios, what is quicksort's time complexity?
5. What are the different types of schedulers in an OS?
6. Differentiate between UDP and TCP in networking.
7. Why do databases use indexes?
8. What is database normalization, and how does it improve performance?
9. What key differences exist between HTTPS and HTTP?
10. What role does hashing play in cybersecurity?
11. Explain why object-oriented programming is beneficial.
12. How does Java handle memory cleanup using garbage collection?
13. Name different types of learning algorithms in machine learning.
14. How do neural networks function in deep learning?
15. How does blockchain technology maintain security?