- 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?