13 Lecture - CS101

Important Mcqs

- 1. Which of the following is not a type of algorithm?
 - A) Sorting algorithm
 - B) Search algorithm
 - C) Machine learning algorithm
 - D) Linear algorithm

Answer: D) Linear algorithm

- 2. Which algorithm is used to find the shortest route between two cities?
 - A) Bubble sort
 - B) Quick sort
 - C) Gradient descent
 - D) Dijkstra's algorithm
 - Answer: D) Dijkstra's algorithm
- 3. Which algorithm is used to analyze and learn from data in order to make predictions or decisions?
 - A) Sorting algorithm
 - B) Search algorithm
 - C) Optimization algorithm
 - D) Machine learning algorithm
 - Answer: D) Machine learning algorithm

4. Which factor is not important to consider when designing an algorithm?

- A) Efficiency
- B) Accuracy
- C) Scalability
- D) Complexity
- Answer: D) Complexity

5. Which sorting algorithm has the worst time complexity?

- A) Quick sort
- B) Bubble sort
- C) Insertion sort
- D) Selection sort
- Answer: B) Bubble sort

6. Which search algorithm is more efficient for a sorted data set?

- A) Linear search
- B) Binary search
- C) Hash-based search
- D) All of the above

Answer: B) Binary search

7. Which optimization algorithm is inspired by the process of cooling metals?

- A) Gradient descent
- B) Simulated annealing
- C) Genetic algorithms
- D) Particle swarm optimization

Answer: B) Simulated annealing

8. Which machine learning algorithm is based on decision trees?

- A) Neural networks
- B) Support vector machines
- C) Random forests
- D) K-means clustering

Answer: C) Random forests

9. Which factor is most important to consider in real-time applications?

- A) Efficiency
- B) Accuracy
- C) Scalability
- D) Complexity

Answer: A) Efficiency

10. Which algorithm is used to find the optimal solution for a problem by evaluating all possible solutions?

- A) Brute force algorithm
- B) Greedy algorithm
- C) Dynamic programming
- D) Hill climbing algorithm

Answer: A) Brute force algorithm