Difficulty level 1 question: Compare and contrast a stack and a queue data structure. Difficulty level 1 question: What is the difference between an algorithm and a data structure? Difficulty level 2 question: Explain the concept of recursion and discuss its advantages and disadvantages. Difficulty level 2 question: What is the time complexity of searching in a binary search tree? Difficulty level 3 question: Discuss the concept of time complexity and its importance in algorithm analysis.

university, faculty name subject, semester ticket №2

Difficulty level 1 question: Compare and contrast a binary tree and a binary search tree. Difficulty level 1 question: Compare and contrast a stack and a queue data structure. Difficulty level 2 question: What is the time complexity of searching in a binary search tree? Difficulty level 2 question: Describe the steps involved in performing a binary search algorithm on a sorted array. Difficulty level 3 question: Explain the concept of a hash table and its purpose.

university, faculty name subject, semester ticket №3

Difficulty level 1 question: What is the purpose of a priority queue data structure and how is it different from a normal queue? Difficulty level 1 question: What is the difference between a breadth-first search (BFS) and a depth-first search (DFS) algorithm? Difficulty level 2 question: Describe the process of inserting a new element in a heap data structure and maintaining the heap property. Difficulty level 2 question: What is the time complexity of searching in a binary search tree? Difficulty level 3 question: Explain the concept of a hash table and its purpose.

Difficulty level 1 question: What is the purpose of a priority queue data structure and how is it different from a normal queue? Difficulty level 1 question: Explain the concept of a trie data structure and its applications. Difficulty level 2 question: Discuss the difference between an array and a linked list data structure. Difficulty level 2 question: Explain the concept of graph traversal and differentiate between depth-first and breadth-first traversal. Difficulty level 3 question: Discuss the concept of time complexity and its importance in algorithm analysis.

university, faculty name subject, semester ticket №5

Difficulty level 1 question: What is the purpose of a priority queue data structure and how is it different from a normal queue? Difficulty level 1 question: Compare and contrast a binary tree and a binary search tree. Difficulty level 2 question: Explain the concept of graph traversal and differentiate between depth-first and breadth-first traversal. Difficulty level 2 question: What is the purpose of memoization in dynamic programming algorithms? Difficulty level 3 question: Explain the concept of a hash table and its purpose.

university, faculty name subject, semester ticket №6

Difficulty level 1 question: Define the term "Big-O notation" and its significance in algorithm analysis. Difficulty level 1 question: What is the purpose of a priority queue data structure and how is it different from a normal queue? Difficulty level 2 question: Explain the concept of recursion and discuss its advantages and disadvantages. Difficulty level 2 question: What is the purpose of memoization in dynamic programming algorithms? Difficulty level 3 question: Explain the concept of a hash table and its purpose.

Difficulty level 1 question: What is the difference between an algorithm and a data structure? Difficulty level 1 question: Explain the concept of a trie data structure and its applications. Difficulty level 2 question: Describe the steps involved in performing a binary search algorithm on a sorted array. Difficulty level 2 question: Describe the process of sorting an array using the quicksort algorithm. Difficulty level 3 question: Explain the concept of a hash table and its purpose.

university, faculty name subject, semester ticket №8

Difficulty level 1 question: Compare and contrast a stack and a queue data structure. Difficulty level 1 question: What is the difference between an algorithm and a data structure? Difficulty level 2 question: Describe the process of inserting a new element in a heap data structure and maintaining the heap property. Difficulty level 2 question: What are the basic operations in a linked list data structure? Difficulty level 3 question: Discuss the differences between a singly linked list and a doubly linked list.

university, faculty name subject, semester ticket №9

Difficulty level 1 question: What is the purpose of a priority queue data structure and how is it different from a normal queue? Difficulty level 1 question: Compare and contrast a binary tree and a binary search tree. Difficulty level 2 question: Explain the concept of recursion and discuss its advantages and disadvantages. Difficulty level 2 question: Discuss the difference between an array and a linked list data structure. Difficulty level 3 question: Discuss the differences between a singly linked list and a doubly linked list.

Difficulty level 1 question: Define the term "Big-O notation" and its significance in algorithm analysis. Difficulty level 1 question: Compare and contrast a stack and a queue data structure. Difficulty level 2 question: Describe the process of sorting an array using the quicksort algorithm. Difficulty level 2 question: Explain the concept of recursion and discuss its advantages and disadvantages. Difficulty level 3 question: Discuss the concept of time complexity and its importance in algorithm analysis.

### university, faculty name subject, semester ticket №11

Difficulty level 1 question: Compare and contrast a binary tree and a binary search tree. Difficulty level 1 question: What is the purpose of a priority queue data structure and how is it different from a normal queue? Difficulty level 2 question: Describe the steps involved in performing a binary search algorithm on a sorted array. Difficulty level 2 question: Explain the concept of recursion and discuss its advantages and disadvantages. Difficulty level 3 question: Explain the concept of a hash table and its purpose.

### university, faculty name subject, semester ticket №12

Difficulty level 1 question: Compare and contrast a stack and a queue data structure. Difficulty level 1 question: Explain the concept of a trie data structure and its applications. Difficulty level 2 question: Describe the process of inserting a new element in a heap data structure and maintaining the heap property. Difficulty level 2 question: What is the time complexity of searching in a binary search tree? Difficulty level 3 question: Explain the concept of a hash table and its purpose.

Difficulty level 1 question: What is the difference between an algorithm and a data structure? Difficulty level 1 question: What is the difference between a breadth-first search (BFS) and a depth-first search (DFS) algorithm? Difficulty level 2 question: What is the purpose of memoization in dynamic programming algorithms? Difficulty level 2 question: Describe the process of sorting an array using the quicksort algorithm. Difficulty level 3 question: Discuss the differences between a singly linked list and a doubly linked list.

university, faculty name subject, semester ticket №14

Difficulty level 1 question: What is the difference between a breadth-first search (BFS) and a depth-first search (DFS) algorithm? Difficulty level 1 question: Compare and contrast a binary tree and a binary search tree. Difficulty level 2 question: Explain the concept of recursion and discuss its advantages and disadvantages. Difficulty level 2 question: What are the basic operations in a linked list data structure? Difficulty level 3 question: Explain the concept of a hash table and its purpose.

university, faculty name subject, semester ticket №15

Difficulty level 1 question: What is the difference between an algorithm and a data structure? Difficulty level 1 question: What is the purpose of a priority queue data structure and how is it different from a normal queue? Difficulty level 2 question: Describe the process of inserting a new element in a heap data structure and maintaining the heap property. Difficulty level 2 question: Explain the concept of graph traversal and differentiate between depth-first and breadth-first traversal. Difficulty level 3 question: Discuss the differences between a singly linked list and a doubly linked list.

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university, faculty name subject, semester ticket №17

Difficulty level 1 question: What is the difference between a breadth-first search (BFS) and a depth-first search (DFS) algorithm? Difficulty level 1 question: Compare and contrast a binary tree and a binary search tree. Difficulty level 2 question: Explain the concept of graph traversal and differentiate between depth-first and breadth-first traversal. Difficulty level 2 question: What are the basic operations in a linked list data structure? Difficulty level 3 question: Explain the concept of a hash table and its purpose.

university, faculty name subject, semester ticket №18

Difficulty level 1 question: Compare and contrast a stack and a queue data structure. Difficulty level 1 question: What is the purpose of a priority queue data structure and how is it different from a normal queue? Difficulty level 2 question: What is the time complexity of searching in a binary search tree? Difficulty level 2 question: Discuss the difference between an array and a linked list data structure. Difficulty level 3 question: Explain the concept of a hash table and its purpose.

Difficulty level 1 question: Compare and contrast a stack and a queue data structure. Difficulty level 1 question: Define the term "Big-O notation" and its significance in algorithm analysis. Difficulty level 2 question: Explain the concept of graph traversal and differentiate between depth-first and breadth-first traversal. Difficulty level 2 question: Explain the concept of recursion and discuss its advantages and disadvantages. Difficulty level 3 question: Discuss the concept of time complexity and its importance in algorithm analysis.

university, faculty name subject, semester ticket №20

Difficulty level 1 question: What is the difference between an algorithm and a data structure? Difficulty level 1 question: What is the purpose of a priority queue data structure and how is it different from a normal queue? Difficulty level 2 question: What is the purpose of memoization in dynamic programming algorithms? Difficulty level 2 question: Describe the steps involved in performing a binary search algorithm on a sorted array. Difficulty level 3 question: Discuss the differences between a singly linked list and a doubly linked list.