

Queue Data Structure

Due 30 Jan at 23:59**Points** 10**Questions** 10**Available** 29 Jan at 11:30 - 30 Jan at 23:59 1 day**Time limit** None

Attempt history

	Attempt	Time	Score
LATEST	<u>Attempt 1</u>	10 minutes	6 out of 10

Score for this quiz: **6** out of 10

Submitted 29 Jan at 14:56

This attempt took 10 minutes.

Question 1

1 / 1 pts

Adding an element in the queue is known as

Correct!☒ Enqueue☐ Dequeue☐ push☐ pop

Question 2

1 / 1 pts

Deleting an element from a queue is called as

Correct!☒ Dequeue☐ pop☐ Enqueue

☐ push

Question 3**1 / 1 pts**

Queue is an abstract Data Structure

Correct!

☒ True

☐ False

Question 4**1 / 1 pts**

- Given a queue, initially empty. The following operations were performed on the queue

```
1. Enqueue(4)
2. Enqueue(10)
3. Enqueue(18)
4. Enqueue(25)
5. Dequeue()
6. Enqueue(100)
7. Dequeue()
8. Dequeue()
```

What is the output of steps 5,7,8

Correct!

☒ 4,10,18

☐ 100,25,18

☐ 4,18,25

☐ None of These

Question 5**1 / 1 pts**

- Given the following code snippet

```
function dequeue(){
  if (____){
    print ("Underflow")
  }
  ans = arr[front];
  front++;
  print (ans)
}
```

- What should be the condition inside the **if statement**, for this dequeue operation to work correctly

Correct!☒ front == rear☐ front == -1☐ front == 0☐ rear == -1**Question 6****0 / 1 pts**

- Given the following code snippet

```
function enqueue(data){
  if (____){
    print ("Overflow")
  }
  arr[rear] = data;
  rear++;
}
```

- What should be the condition inside the **if statement**, for this enqueue operation to work correctly

Correct answer☐ rear == size☐ rear == size - 1**You Answered**☒ rear == front☐ front == size**Question 7****0 / 1 pts**

- In the implementation of queue, with the help of an array, what does the **rear** pointer points to

correct answer

☐

The position at which the new element will be added, in case of an enqueue operation

You Answered

☒

The position that the element will be deleted from, in case of an enqueue operation

☐

Both the above

☐

None of the above

Question 8

0 / 1 pts

```
function enqueue(data){
  if (rear == size){
    print ("overflow")
  }
  arr[rear] = data;
  rear++
}
```

- Given the above implementation of the **Enqueue** operation, what is the time complexity of the enqueue operation

correct answer

☐

O(1)

☐

O(N)

You Answered

☒

O(logN)

☐

None of the above

Question 9

0 / 1 pts

```
function dequeue(){
  if (rear == front){
    print ("underflow")
  }
  ans = arr[front]
  front++;
  print (ans)
}
```

- Given the above implementation of the **Dequeue** operation, what is the time complexity of the enqueue operation

Correct answer

☐ O(1)

You Answered

☒ O(N)☐ O(logN)☐ None of the above**Question 10****1 / 1 pts**

- In the implementation of queue with the help of an array, what does the **front** pointer points to

Correct!☒

The location from which the element will be deleted, in case of a dequeue operation

☐

The location at which the element is added, in case of an enqueue operation

☐

Both the statements are correct

☐

None of these

Quiz score: 6 out of 10