

```
2 usages new *
1 class Queue:
    new *
2     def __init__(self):
3         self.queue = []
4
5     4 usages new *
6     def is_empty(self):
7         return len(self.queue) == 0
8
9     14 usages new *
10    def enqueue(self, item):
11        self.queue.append(item)
12        print(f"Enqueued: {item}")
13
14    12 usages new *
15    def dequeue(self):
16        if self.is_empty():
17            return "Queue is empty"
18        return self.queue.pop(0)
19
20    1 usage new *
21    def first(self):
22        if self.is_empty():
23            return "Queue is empty"
24        return self.queue[0]
25
26    new *
27    def size(self):
28        return len(self.queue)
29
30    new *
31    def display(self):
32        print("Queue:", self.queue)
```

```

Q = Queue()
Q.enqueue(5)
Q.enqueue(3)
print("Length: ", len(Q.queue))
print("Dequeued number: ", Q.dequeue())
print("Is it empty: ", Q.is_empty())
print("Dequeued number: ", Q.dequeue())
print("Is it empty: ", Q.is_empty())
print("Dequeued number: ", Q.dequeue())
Q.enqueue(7)
Q.enqueue(9)
print("First", Q.first())
Q.enqueue(4)
print("Length: ", len(Q.queue))
print("Dequeued number: ", Q.dequeue())
print(Q.queue)

```

OUTPUT:

```

Enqueued: 5
Enqueued: 3
Length: 2
Dequeued number: 5
Is it empty: False
Dequeued number: 3
Is it empty: True
Dequeued number: Queue is empty
Enqueued: 7
Enqueued: 9
First 7
Enqueued: 4
Length: 3
Dequeued number: 7
[9, 4]

```

```
print()
print("Answers: ")
Q=Queue()
Q.enqueue(5)
Q.enqueue(3)
print("Dequeued number: ",Q.dequeue())
Q.enqueue(2)
Q.enqueue(8)
print("Dequeued number: ",Q.dequeue())
print("Dequeued number: ",Q.dequeue())
Q.enqueue(9)
Q.enqueue(1)
print("Dequeued number: ",Q.dequeue())
Q.enqueue(7)
Q.enqueue(6)
print("Dequeued number: ",Q.dequeue())
print("Dequeued number: ",Q.dequeue())
Q.enqueue(4)
print("Dequeued number: ",Q.dequeue())
print("Dequeued number: ",Q.dequeue())
print(Q.queue)
```

OUTPUT:

Answers:

Enqueued: 5

Enqueued: 3

Dequeued number: 5

Enqueued: 2

Enqueued: 8

Dequeued number: 3

Dequeued number: 2

Enqueued: 9

Enqueued: 1

Dequeued number: 8

Enqueued: 7

Enqueued: 6

Dequeued number: 9

Dequeued number: 1

Enqueued: 4

Dequeued number: 7

Dequeued number: 6

[4]