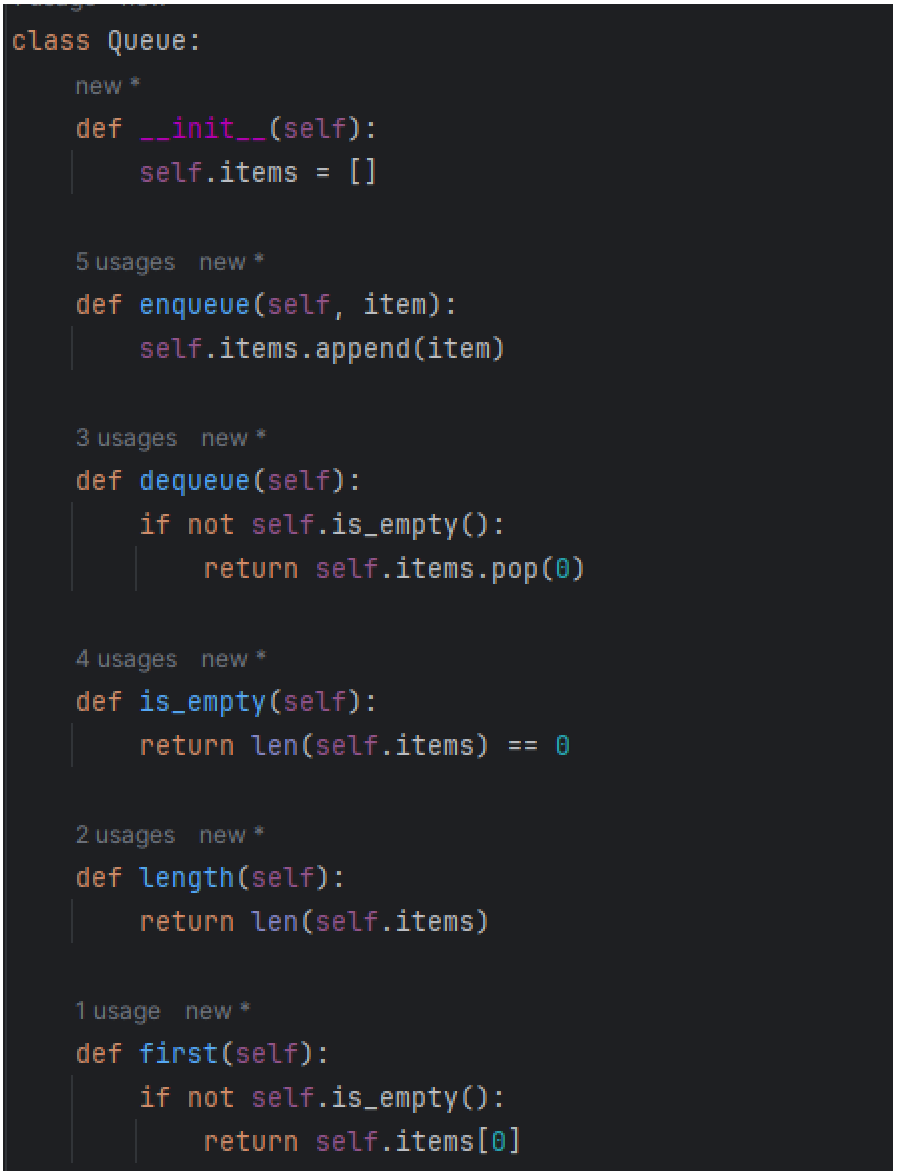
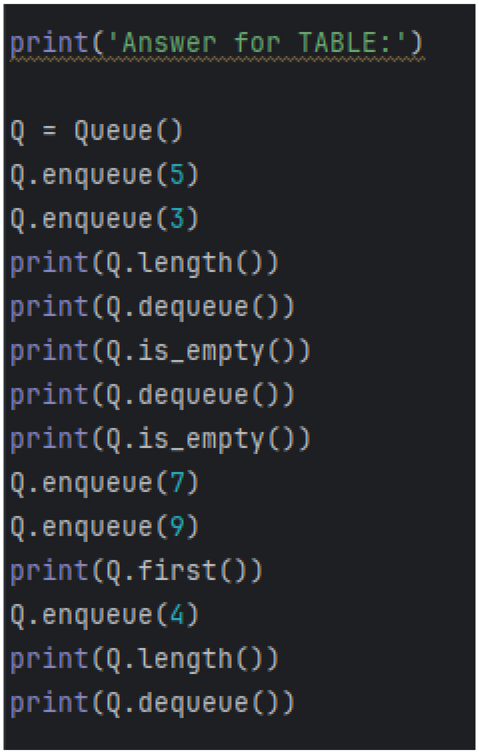
For TABLE:

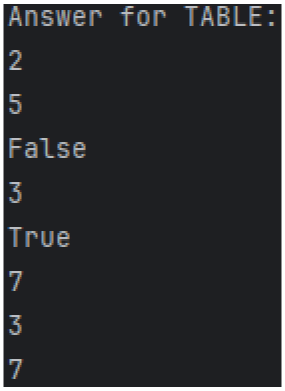


```
class Queue:
    new *
    def __init__(self):
        self.items = []

    5 usages   new *
    def enqueue(self, item):
        self.items.append(item)

    3 usages   new *
    def dequeue(self):
        if not self.is_empty():
            return self.items.pop(0)

    4 usages   new *
    def is_empty(self):
        return len(self.items) == 0

    2 usages   new *
    def length(self):
        return len(self.items)

    1 usage   new *
    def first(self):
        if not self.is_empty():
            return self.items[0]
```



```
print('Answer for TABLE:')

Q = Queue()
Q.enqueue(5)
Q.enqueue(3)
print(Q.length())
print(Q.dequeue())
print(Q.is_empty())
print(Q.dequeue())
print(Q.is_empty())
Q.enqueue(7)
Q.enqueue(9)
print(Q.first())
Q.enqueue(4)
print(Q.length())
print(Q.dequeue())
```

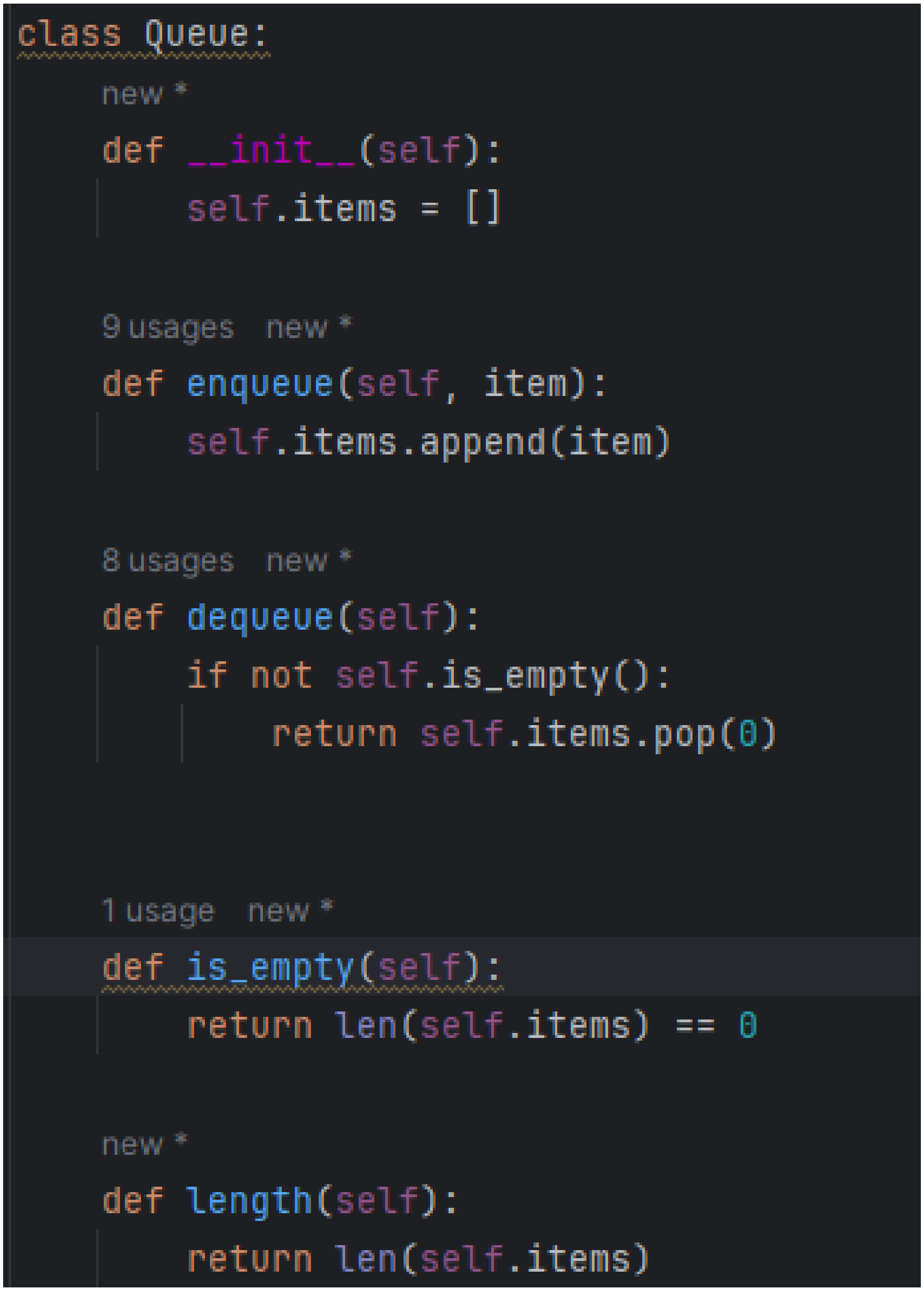
OUTPUT



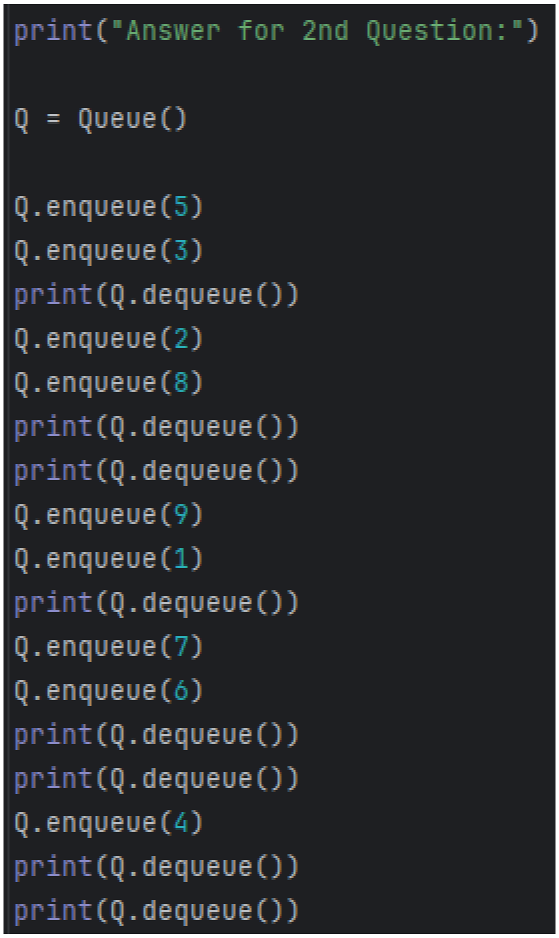
```
Answer for TABLE:
2
5
False
3
True
7
3
7
```

For 2nd Question:

What values are returned during the following sequence of queue operations, if executed on an initially empty queue? enqueue(5), enqueue(3), dequeue(), enqueue(2), enqueue(8), dequeue(), dequeue(), enqueue(9), enqueue(1), dequeue(), enqueue(7), enqueue(6), dequeue(), dequeue(), enqueue(4), dequeue(), dequeue().

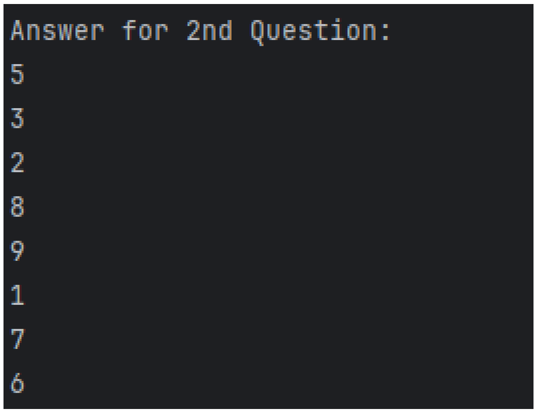


```python
class Queue:

    def __init__(self):
        self.items = []

    def enqueue(self, item):
        self.items.append(item)

    def dequeue(self):
        if not self.is_empty():
            return self.items.pop(0)


    def is_empty(self):
        return len(self.items) == 0

    def length(self):
        return len(self.items)
```



```
print("Answer for 2nd Question:")

Q = Queue()

Q.enqueue(5)
Q.enqueue(3)
print(Q.dequeue())
Q.enqueue(2)
Q.enqueue(8)
print(Q.dequeue())
print(Q.dequeue())
Q.enqueue(9)
Q.enqueue(1)
print(Q.dequeue())
Q.enqueue(7)
Q.enqueue(6)
print(Q.dequeue())
print(Q.dequeue())
Q.enqueue(4)
print(Q.dequeue())
print(Q.dequeue())
```

OUTPUT:



```
Answer for 2nd Question:
5
3
2
8
9
1
7
6
```