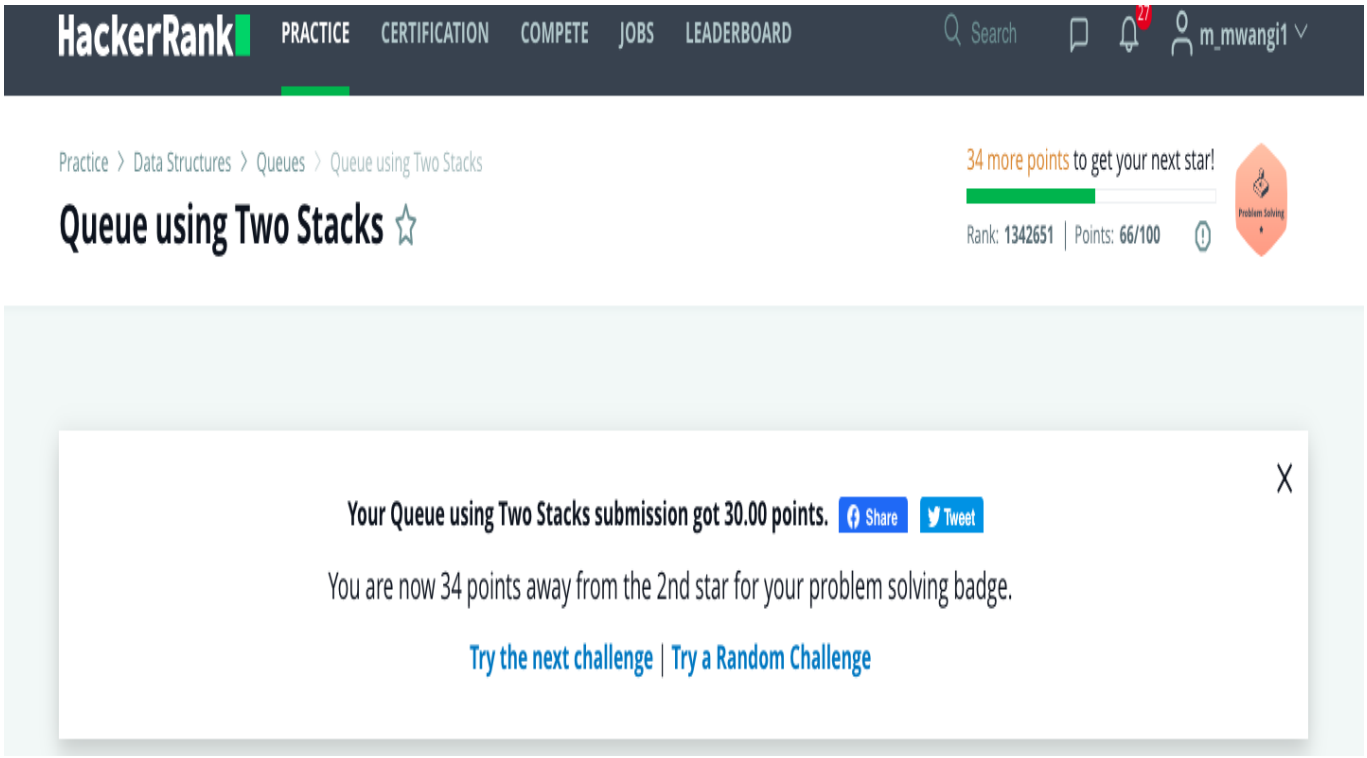
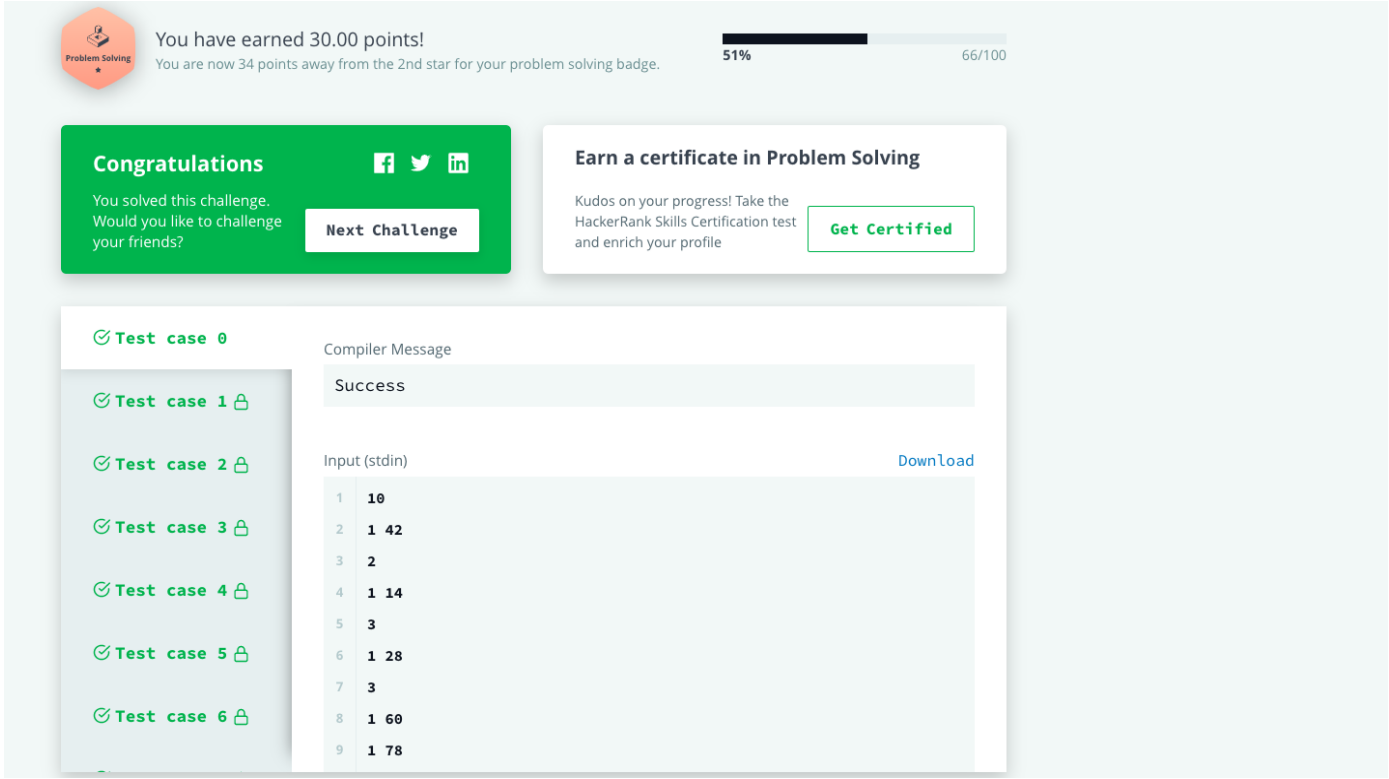
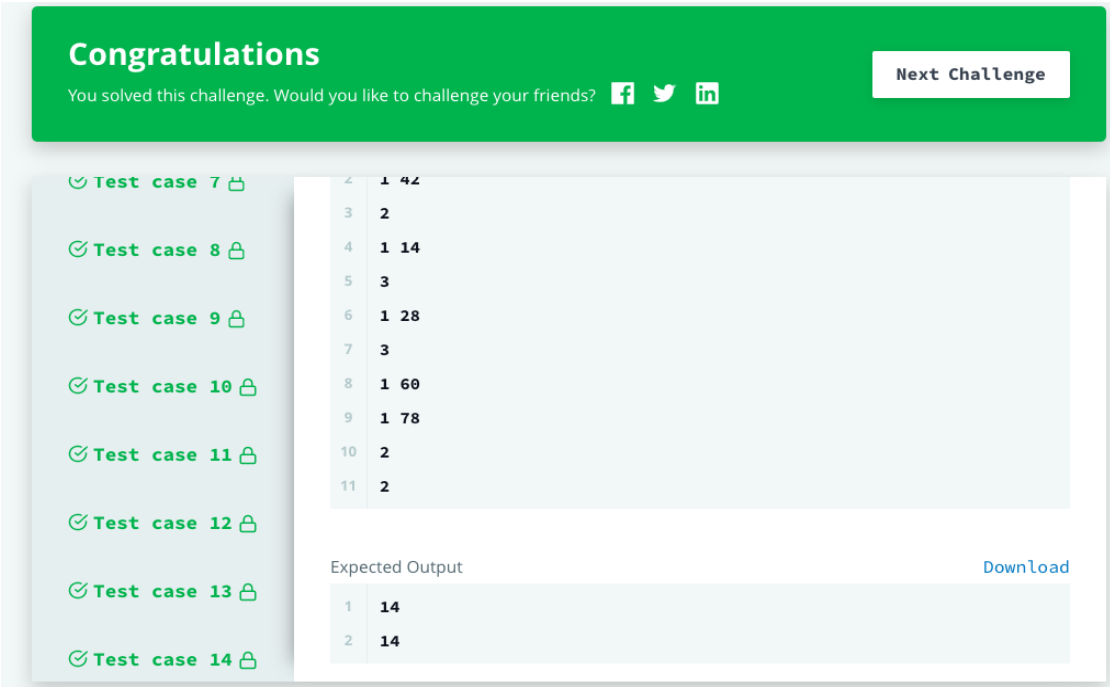
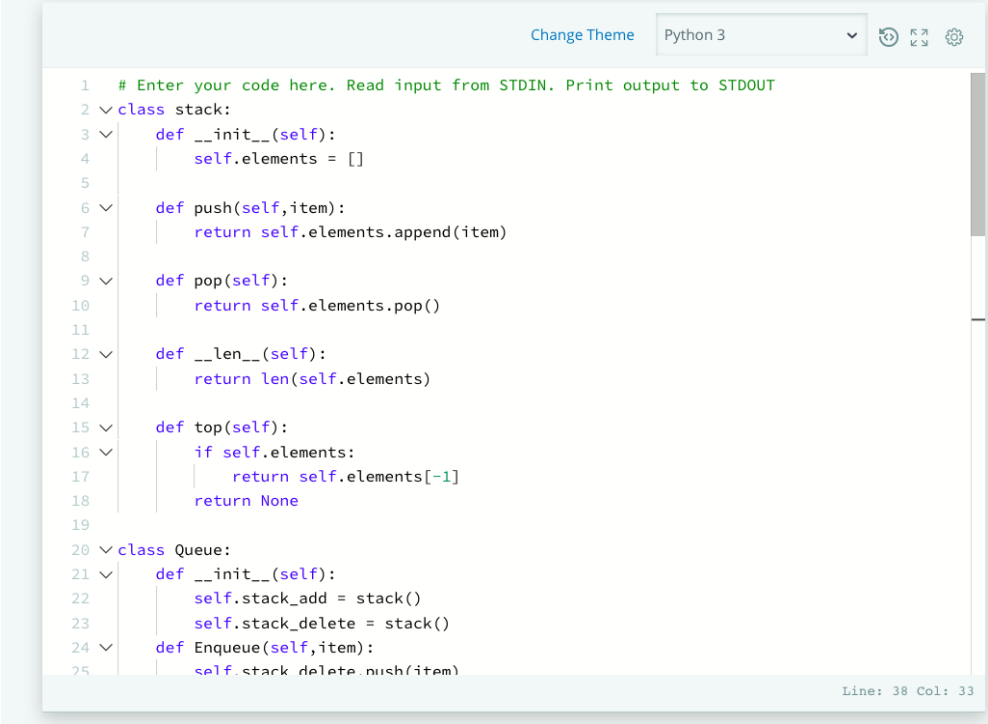
HackerrankName: Modester Mwangi









Hackerrank Code:

```
class stack:
    def __init__(self):
        self.elements = []

    def push(self,item):
        return self.elements.append(item)

    def pop(self):
        return self.elements.pop()

    def __len__(self):
        return len(self.elements)

    def top(self):
        if self.elements:
            return self.elements[-1]
        return None

class Queue:
    def __init__(self):
        self.stack_front = stack()
        self.stack_rear = stack()

        #Enqueue
    def Enqueue(self,item):
        self.stack_rear.push(item)
    #Dequeue
    def Dequeue(self):
        if self.stack_front:
            return self.stack_front.pop()
        return self.replace_stack_front().pop()

    def peek(self):
```

```
        if self.stack_front:
            return self.stack_front.top()
        return self.replace_stack_front().top()

    def replace_stack_front(self):
        while self.stack_rear:
            self.stack_front.push(self.stack_rear.pop())
        return self.stack_front

#read through inputs and split it and store in list
def read_inputs():
    t = input().strip()
    line= t.split()
    t_type = int(line[0])


    if len(line) == 1:
        return(t_type, None)
    num = int(line[1])
    return t_type,num

def main():
    q = Queue()
    element = int(input().strip())

#loop through the list and print the front element
    for i in range(element):
        t_type,num = read_inputs()
        if t_type == 1:
            q.Enqueue(num)

        elif t_type == 2:
            q.Dequeue()
```

```
        elif t_type == 3:
            print(q.peek())
if __name__ == "__main__":
    main()
```