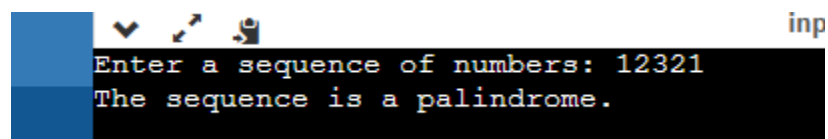


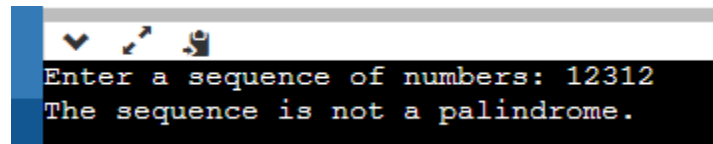
Esteron, Jenel F.  
CPE21S1

```
main.py
1 class Stack:
2     def __init__(self):
3         self.items = []
4
5     def is_empty(self):
6         return len(self.items) == 0
7
8     def push(self, item):
9         self.items.append(item)
10
11    def pop(self):
12        if not self.is_empty():
13            return self.items.pop()
14        return None
15
16    def is_palindrome(numbers):
17        num_stack = Stack()
18
19        for num in numbers:
20            num_stack.push(num)
21
22        for num in numbers:
23            if num != num_stack.pop():
24                return False
25
26        return True
27
28    def main():
29        try:
30            numbers = input("Enter a sequence of numbers: ").strip()
31            numbers = [int(num) for num in numbers if num.isdigit()]
32
33            if is_palindrome(numbers):
34                print("The sequence is a palindrome.")
35            else:
36                print("The sequence is not a palindrome.")
37        except ValueError:
38            print("Invalid input. Please enter a sequence of numbers.")
39
40    if __name__ == "__main__":
41        main()
```



inp

```
Enter a sequence of numbers: 12321
The sequence is a palindrome.
```



```
Enter a sequence of numbers: 12312
The sequence is not a palindrome.
```

"I affirm that I will not give or receive any unauthorized help on this exam, and that all work will be my own."