Esteron, Jenel F.
CPE21S1

```python
class Stack:
    def __init__(self):
        self.items = []

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

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

    def pop(self):
        if not self.is_empty():
            return self.items.pop()
        return None

def is_palindrome(numbers):
    num_stack = Stack()

    for num in numbers:
        num_stack.push(num)

    for num in numbers:
        if num != num_stack.pop():
            return False

    return True

def main():
    try:
        numbers = input("Enter a sequence of numbers: ").strip()
        numbers = [int(num) for num in numbers if num.isdigit()]

        if is_palindrome(numbers):
            print("The sequence is a palindrome.")
        else:
            print("The sequence is not a palindrome.")
    except ValueError:
        print("Invalid input. Please enter a sequence of numbers.")

if __name__ == "__main__":
    main()
```

```
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.”