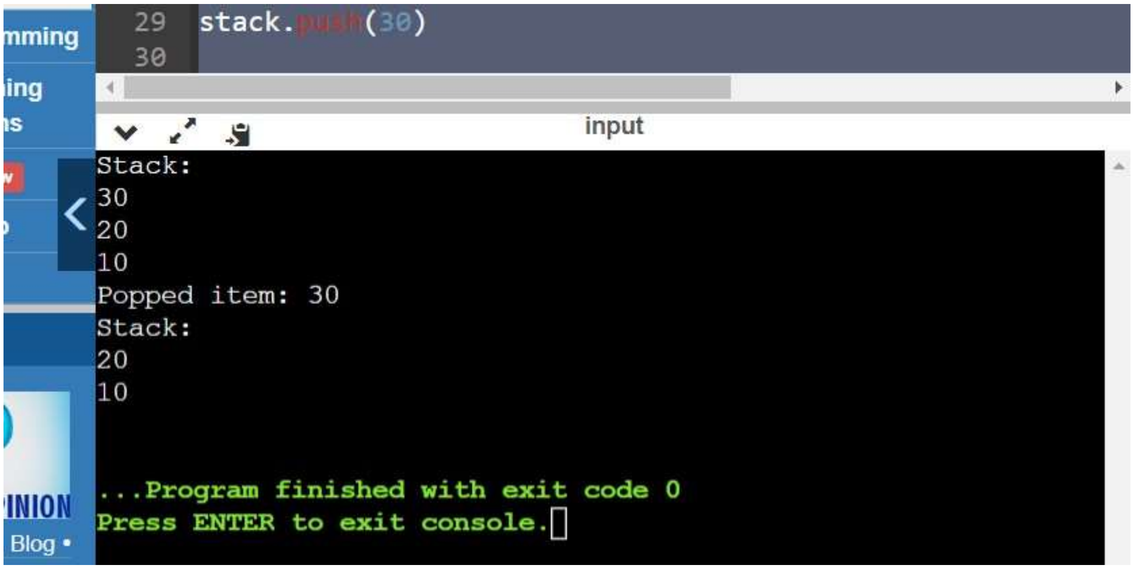
Day-13 : Stack & Queue

Problem 1: Implement a stack using an array.

```
class Stack:
    def __init_(self):
        self.stack = []

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

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

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

    def print_stack(self):
        if not self.is_empty():
            print("Stack:")
            for item in reversed(self.stack):
                print(item)
        else:
            print("Stack is empty")

stack = Stack()

stack.push(10)
stack.push(20)
stack.push(30)
stack.print_stack()


popped_item = stack.pop()

if popped_item is not None:

    print("Popped item:", popped_item)


stack.print_stack()
```



```
stack.push(30)
```

```
Stack:
30
20
10
Popped item: 30
Stack:
20
10


...Program finished with exit code 0
Press ENTER to exit console.
```