class Node:

def \_\_init\_\_(self, data):

self.data = data

self.next = None

class Stack:

def \_\_init\_\_(self):

self.top = None

def push(self, value):

new\_node = Node(value)

new\_node.next = self.top

self.top = new\_node

print(f"{value} pushed to stack")

def pop(self):

if self.top is None:

print("Stack is Empty!")

else:

print(f"{self.top.data} popped from stack")

self.top = self.top.next

def display(self):

if self.top is None:

print("Stack is Empty!")

else:

temp = self.top

while temp:

print(temp.data, end=" --> ")

temp = temp.next

print("NULL")

# Example usage:

stack = Stack()

while True:

print("\n1. Push\n2. Pop\n3. Display\n4. Exit")

choice = input("Enter your choice: ")

if choice == '1':

val = input("Enter value to push: ")

stack.push(val)

elif choice == '2':

stack.pop()

elif choice == '3':

stack.display()

elif choice == '4':

print("Exiting...")

break

else:

print("Invalid choice!")

**OUTPUT**:

