```
class stack:
 def __init__(self):
   self.items=[]
 def is_empty(self):
   return len(self.items)==0
 def push(self,data):
   return self.items.append(data)
 def pop(self):
   if not self.is_empty():
     return self.items.pop()
   else:
     raise IndexError("Stack is empty...!!!")
 def peek(self):
   if not self.is_empty():
     return self.items[-1]
   else:
      raise IndexError("Stack is empty...!!!")
 def size(self):
   return len(self.items)
def operations():
 s1=stack()
 print("Select any one operation: ")
 print("1. Push")
 print("2. Pop")
 print("3. Peek")
 print("4. Exit")
 while True:
   select = input("Select -> 1/2/3/4: ")
   if select in ('1','2','3','4'):
     try:
       if select=='1':
         n1 = int(input("enter data: "))
         s1.push(n1)
         print("Element pushed into stack")
       elif select=='2':
         i2 = s1.pop()
         print("Element popped in the stack is : ",i2)
        elif select=='3':
         i3 = s1.peek()
         print("Element peek in the stack is : ",i3)
       else:
         if select=='4':
           break
     except:
      print("please enter a valid one...!")
   else:
     print("Select a Valid options...")
operations()

→ Select any one operation:
     1. Push
     2. Pop
```

```
3. Peek
4. Exit
Select -> 1/2/3/4: 1
enter data: 10
Element pushed into stack
Select -> 1/2/3/4: 1
enter data: 20
Element pushed into stack
Select -> 1/2/3/4: 1
enter data: 30
Element pushed into stack
Select -> 1/2/3/4: 1
enter data: 40
Element pushed into stack
Select -> 1/2/3/4: 1
enter data: 50
Element pushed into stack
Select -> 1/2/3/4: 3
Element peek in the stack is : 50
Select -> 1/2/3/4: 2
Element popped in the stack is : 50
Select -> 1/2/3/4: 2
Element popped in the stack is: 40
Select -> 1/2/3/4: 2
Element popped in the stack is: 30
Select -> 1/2/3/4: 3
Element peek in the stack is : 20
```

Select -> 1/2/3/4: 4