```
class stack(list):
  def is_empty(self):
    return len(self)==0
  def push(self,data):
    return self.append(data)
  def pop(self):
    if not self.is_empty():
      return super().pop()
    else:
      raise IndexError("Stack is empty...!!")
  def peek(self):
    if not self.is_empty():
      return self[-1]
    else:
      raise IndexError("Stack is empty...!!")
  def size(self):
    return len(self)
  def insert(self):
    raise ArithmeticError("There is not such metgod like insert...!!!")

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: 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
```

```
Start coding or generate with AI.
```