Exercise:2

class Node:

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

self.data=data

self.next=None

class Stack:

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

self.top=None

def is\_empty(self):

return self.top is None

def push(self,data):

new\_node=Node(data)

new\_node.next=self.top

self.top=new\_node

def pop(self):

if self.is\_empty():

return None

popped\_data=self.top.data

self.top=self.top.next

return popped\_data

def peek(self):

if self.is\_empty():

return None

return self.top.data

stack=Stack()

stack.push(1)

stack.push(2)

stack.push(3)

print("peek:",stack.peek())

print("pop:",stack.pop())

print("pop:",stack.pop())

print("peek:",stack.peek())

print("is empty:",stack.is\_empty())

output:

peek: 3

pop: 3

pop: 2

peek: 1

is empty: False