

Problem Statement:

Sort a stack using a temporary stack

```
def sortStack(stack):
    tmpStack=createStack()
    while(isEmpty(stack)==False):
        tmp=top(stack)
        pop(stack)
        while(isEmpty(tmpStack)== False and int (top(tmpStack))>int(tmp)):
            push(stack,top(tmpStack))
            pop(tmpStack)
        push(tmpStack,tmp)
    return tmpStack

def createStack():
    stack=[]
    return stack

def isEmpty(stack):
    return len(stack)==0

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

def top(stack):
    p=len(stack)
    return stack[p-1]

def pop(stack):
    if(isEmpty(stack)):
        print("Stack Underflow")
        exit(1)
    return stack.pop()

def prints(stack):
```

```
        for i in range(len(stack)-1,-1,-1):
            print(stack[i],end=' ')
        print()

stack=createStack()
push(stack,str(34))
push(stack,str(3))
push(stack,str(31))
push(stack,str(98))
push(stack,str(92))
push(stack,str(23))
print("Sorted numbers are:")
sortedst=sortStack(stack)
prints(sortedst)
```

OUTPUT:

3 23 31 34 92 98