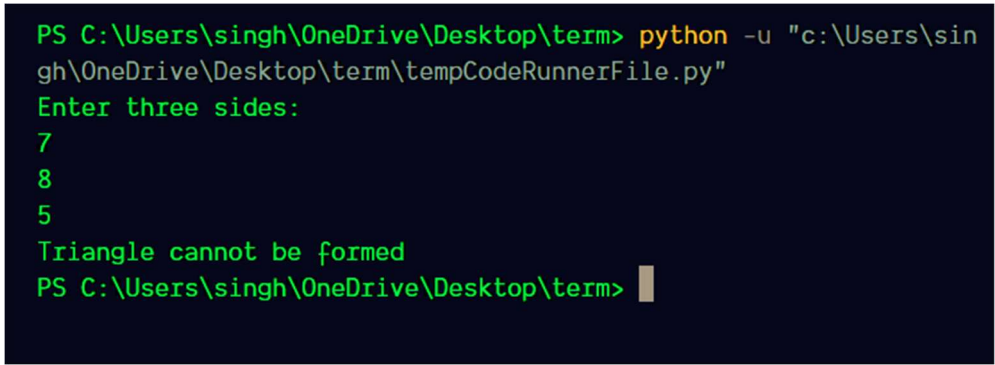


Source Code:

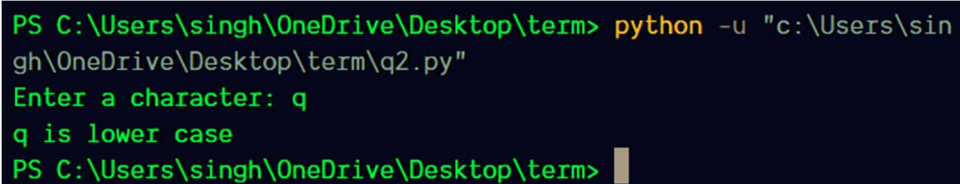
```
print("Enter three sides: ")
a=int(input())
b=int(input())
c=int(input())
if(a+b<=c) or (a+c<=b) or (c+b<=a):
    print("Triangle can be formed ")
else:
    print("Triangle cannot be formed ")
```

Output:

```
PS C:\Users\singh\OneDrive\Desktop\term> python -u "c:\Users\singh\OneDrive\Desktop\term\tempCodeRunnerFile.py"
Enter three sides:
7
8
5
Triangle cannot be formed
PS C:\Users\singh\OneDrive\Desktop\term>
```

Source code:

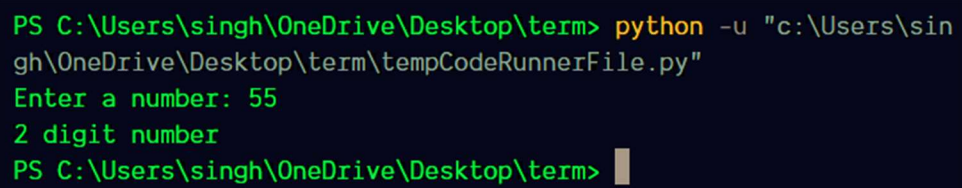
```
char=input("Enter a character: ")[0]
if(char.islower()):
    print(char+" is lower case")
elif(char.isupper()):
    print(char+" is upper case")
elif(char.isdigit()):
    print(char+" is a digit")
else:
    print(char+" is a special")
```

Output:

```
PS C:\Users\singh\OneDrive\Desktop\term> python -u "c:\Users\singh\OneDrive\Desktop\term\q2.py"
Enter a character: q
q is lower case
PS C:\Users\singh\OneDrive\Desktop\term>
```

Source code:

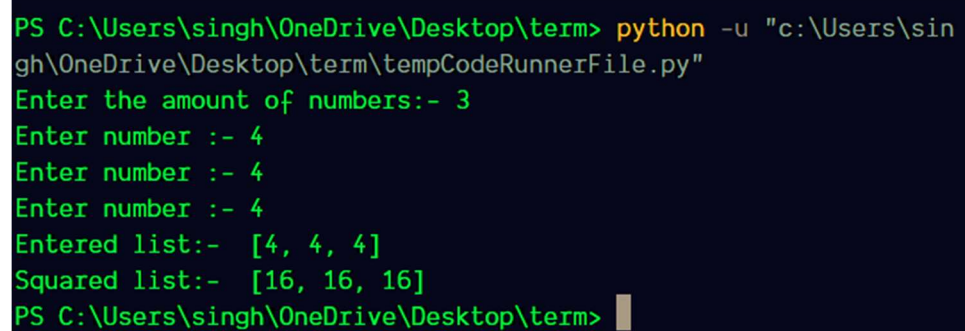
```
num=int(input("Enter a number: "))  
count=0  
while(num>0):  
    count+=1  
    num=num//10  
print(count,"digit number")
```

Output:A screenshot of a Windows PowerShell terminal window. The prompt is 'PS C:\Users\singh\OneDrive\Desktop\term>'. The user enters 'python -u "c:\Users\singh\OneDrive\Desktop\term\tempCodeRunnerFile.py"'. The program prompts 'Enter a number: 55'. The program outputs '2 digit number'. The prompt returns to 'PS C:\Users\singh\OneDrive\Desktop\term>'.

```
PS C:\Users\singh\OneDrive\Desktop\term> python -u "c:\Users\singh\OneDrive\Desktop\term\tempCodeRunnerFile.py"  
Enter a number: 55  
2 digit number  
PS C:\Users\singh\OneDrive\Desktop\term>
```

Source Code:

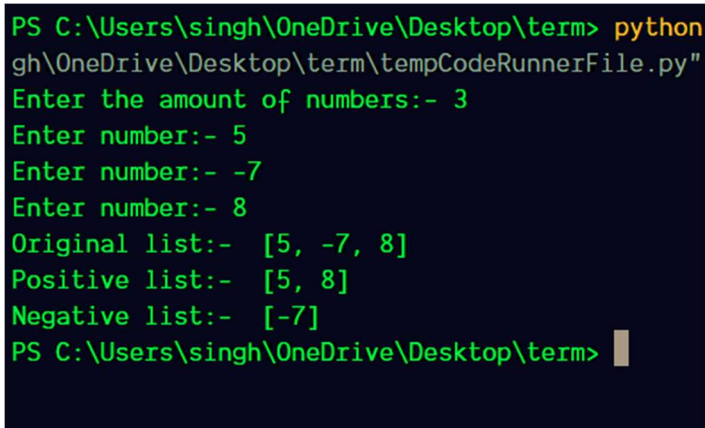
```
list1=[]  
square=[]  
limit=int(input("Enter the amount of numbers:- "))  
i=0  
while(i<limit):  
    list1.append(int(input("Enter number :- ")))  
    square.append(list1[i]**2)  
    i+=1  
print("Entered list:- ",list1)  
print("Squared list:- ",square)
```

Output:

```
PS C:\Users\singh\OneDrive\Desktop\term> python -u "c:\Users\singh\OneDrive\Desktop\term\tempCodeRunnerFile.py"  
Enter the amount of numbers:- 3  
Enter number :- 4  
Enter number :- 4  
Enter number :- 4  
Entered list:- [4, 4, 4]  
Squared list:- [16, 16, 16]  
PS C:\Users\singh\OneDrive\Desktop\term>
```

Source Code:

```
list1=[]  
positive=[]  
negative=[]  
limit=int(input("Enter the amount of numbers:- "))  
i=0  
while(i<limit):  
    list1.append(int(input("Enter number:- ")))  
    if(list1[i]>0):  
        positive.append(list1[i])  
    else:  
        negative.append(list1[i])  
    i+=1  
print("Original list:- ",list1)  
print("Positive list:- ",positive)  
print("Negative list:- ",negative)
```

Output:

```
PS C:\Users\singh\OneDrive\Desktop\term> python  
gh\OneDrive\Desktop\term\tempCodeRunnerFile.py"  
Enter the amount of numbers:- 3  
Enter number:- 5  
Enter number:- -7  
Enter number:- 8  
Original list:- [5, -7, 8]  
Positive list:- [5, 8]  
Negative list:- [-7]  
PS C:\Users\singh\OneDrive\Desktop\term>
```

Source Code:

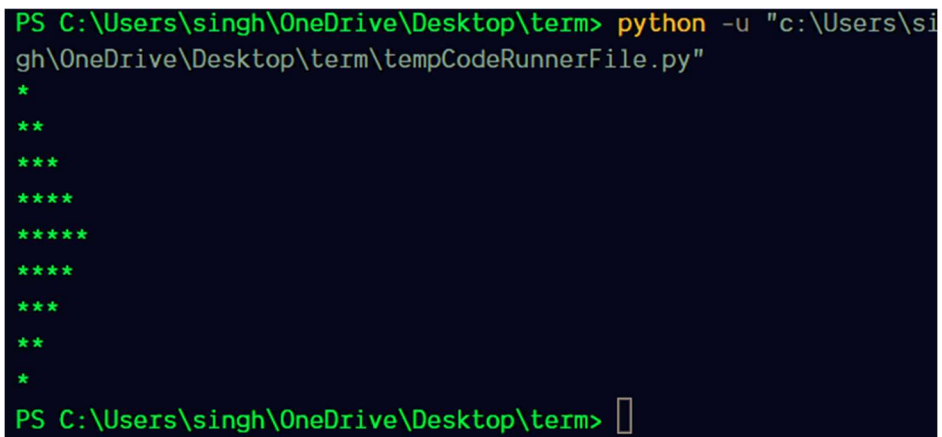
```
start=int(input("Enter starting range:- "))
start+=1
end=int(input("Enter ending range:- "))
while(start<end):
    i=2
    count=0
    while(i<start):
        if(start%i==0):
            count+=1
        i+=1
    if(count==0):print(start)
    start+=1
```

Output:

```
PS C:\Users\singh\OneDrive\Desktop\term> python -u "c:\Users\singh\OneDrive\Desktop\term\tempCodeRunnerFile.py"
Enter starting range:- 0
Enter ending range:- 20
1
2
3
5
7
11
13
17
19
PS C:\Users\singh\OneDrive\Desktop\term>
```

Source Code:

```
i=0
j=1
while(i<9):
    print(j*'')
    if(i>=4):j-=1
    else:j+=1
    i+=1
```

Output:

```
PS C:\Users\singh\OneDrive\Desktop\term> python -u "c:\Users\singh\OneDrive\Desktop\term\tempCodeRunnerFile.py"
*
**
***
****
*****
****
***
**
*
PS C:\Users\singh\OneDrive\Desktop\term> 
```