Exercise1

Use the "Run" button to execute the code.

```
!pip install jovian --upgrade --quiet
```

```
import jovian
```

```
# Execute this to save new versions of the notebook
jovian.commit(project="practice1")
```

1. Write a program to display whether the input is a digit or a letter of the alphabet.

```
a=input()
if (a>='a' and a<='z') or (a>='A' and a<='Z'):
    print('its Aplhabet')
elif(a>='0' and a<='9'):
    print('Its digit')
```

```
5
Its digit
```

Q.2 Write a program to accept a character and display its next and previous character.

Hint: Make use of Ascii values here.

```
c = input()
print("ASCII VALUE IS ", ord(c))
x = chr(ord(c)-1)
print("previous character is", x)
y = chr(ord(c)+1)
print("next character is",y)
```

```
5
ASCII VALUE IS  53
previous character is 4
next character is 6
```

3. Write a program to accept a string from the user, delete all vowels from the string and display the result.

```
a= input("Enter a word")
v=('a','i','o','e','u')
s=''
for i in a:
    if i.lower() not in v:
        s=s+i
print(s)
```

```
Enter a wordsahilchavan
shlchvn
```

Q.4 Write a program to accept three sides of a triangle as the input and print whether the triangle is valid or not.

```
a=int(input("Enter a first side: "))
b=int(input("Enter a second side: "))
c=int(input("Enter a third side: "))
if a==0 or b==0 or c==0:
    print("Triangle is not possible")
elif a+b > c or a+c > b or b+c > a:
    print("tringle is possible")
else:
    print("invalid input")
```

```
Enter a first side: 4
Enter a second side: 8
Enter a third side: 6
tringle is possible
```

Q. 5 Write a program to display the multiplication table of a given number.

```
a = int(input("Enter a number: "))
i=1
while i <= 10:
    b = a * i
    print(a, "X", i, "=", b)
    i += 1
```

```
Enter a number: 5
5 X 1 = 5
5 X 2 = 10
5 X 3 = 15
5 X 4 = 20
5 X 5 = 25
5 X 6 = 30
5 X 7 = 35
5 X 8 = 40
5 X 9 = 45
5 X 10 = 50
```

6. Write a program to accept a string value from the user and accept a char value from the user and find out the total occurrence of the char value in the string value. Note that the count is not case-sensitive Input:

A string and a character whose occurrence is to be found

Output:

An integer

```
from collections import Counter
```

```
x = input("Enter a sentence or word")
y = input("Enter a character")
if y in x:
    count=Counter(x)[y]
    print(count)
```

```
Enter a sentence or wordkailash
Enter a charactera
2
```

#from collections import Counter #letter = 'a' myString = 'aardvark' #counts = Counter(myString) #print(counts) #Counter({'a': 3, 'r': 2, 'v': 1, 'k': 1, 'd': 1}) #count = counts[letter] #print(count)

7.Sum of digits Description Write a program to calculate the sum of the digits of a given number

Input:

An n digit number

Output:

Sum of the digits

```
n=int(input("Enter a number:"))
sum=0
while(n>0):
    remainder=n%10
    sum=sum+remainder
    n=n//10
print("The total sum of digits is:",sum)
```

```
Enter a number:52
The total sum of digits is: 7
```

8.Description Write a program to accept a number from the user and count the zeros, odd digits and non-zero even digits from the entered number.

Input:

A positive integer of n digits

Output:

Three integers representing the occurrences of zeros, odd digits and non-zero even digits from the entered number.

```
a = 0
b = 0
c = 0
num = input("Enter a four digit number ")
l=len(num)
if l == 0:
    print("Wrong input")
else:
    for i in num:
        if int(i) == 0:
            a= a+1
        elif int(i)%2!=0:
            b= b+1
        elif int(i)%2==0:
            c=c+1
print('Number of zeroes',a)
print('Number of odds',b)
print('Number of even',c)
```

```
Enter a four digit number 680250
Number of zeroes 2
Number of odds 1
Number of even 3
```

```
from string import digits
```

9. Description Write a program that takes a string as the input and does the following:

-Removes the numbers, special characters

-Converts uppercase letters to lowercase letters, and vice versa Input:

A string

Output:

A string with numbers, special characters removed, upper and lower cases swapped

```
str = input("Enter a string")
b = ""
for i in str:
    if i.isalnum():
        b+=i
print(b)
```

```
Enter a stringmy23 Sahil@#
my23Sahil
```

```
str = input("Enter a string")
str1 = ""
for i in str:
    if i.isdigit():
        continue
    else:
        str1=str1+i
print(str1)
```

```
Enter a stringmy12 Name34
my Name
```

```
string = input("Enter a string")
print(string.swapcase())
```

```
Enter a stringhaPPy
HAppY
```

```
str = input("Enter a string")
b = ""
str1 = ""

for i in str:
    if i.isalnum():
        if i.isdigit():
            continue
        else:
            str1=str1+i
        b+=i
print(b.swapcase())
```

```
Enter a stringmY12@#
My
```

```

```