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IT1

1. Write a python program to take the input from the user for the first name and last name and concatenate both the strings. Also add comments to the program

```
first = input("ENter first name:")
last = input("Enter last name:")
```

```
ENter first name:Anish
Enter last name:Sharma
```

```
full_name =first+last
full_name
```

```
'AnishSharma'
```

1. Write a program to evaluate the polynomial shown here:

3x3 - 5x2 + 6 for x = 2.55

```
3*pow(2.55,3)-5*pow(2.55,2)+6
```

```
23.231625
```

1. Write a program to output middle three characters of an input string.

```
x=input("String:")
```

```
String:Anish
```

```
mid=len(x)//2
print(x[mid-1:mid+2])
```

```
nis
```

1. Arrange string characters such that lowercase letters should come first.

For example: str1='PyTHon" then output should be "yonPTH"

```
```

```
str1='PyTHon'
y=""
for i in str1:
    x=i
    if x.islower():
        y+=x

for i in str1:
    x=i
    if x.isupper():
        y+=x
print(y)
```

```
yonPTH
```

1. Count all letters, digits, and special symbols from a given string.

```
s = "Anish@123"
digit=0
alpha=0
special=0
for i in s:
    if i.isdigit():
        digit+=1
    elif i.isalpha():
        alpha+=1
    else:
        special+=1


digit
```

```
3
```

```
special
```

```
1
```

```
alpha
```

```
5
```

1. Write a program to count occurrences of all characters within a string.

```
s = "aaababcccddac"

unique = set(s)
unique
```

```
{'a', 'b', 'c', 'd'}
```

```
for i in unique:
    ctr=0
    for j in s:
        if i==j:
            ctr+=1
    print("occurrence of ",i," is ",ctr)
```

```
occurrence of  d  is  2
occurrence of  c  is  4
occurrence of  b  is  2
occurrence of  a  is  5
```

1. Write a program to find the last position of a substring “Rama” in a given string

For e.g. "Mary always stood first in class. Mary now works at Google."

The expected outcome is “The last position of Mary starts at index 34”

```
s="Mary always stood first in class. Mary now works at Google."
s.rfind('Mary')
```

```
34
```

1. Removal all characters from a string except integers

```
s = 'Anis67h123456'
x=''
for i in s:
    if i.isdigit():
        x+=i
s=x
s
```

```
'67123456'
```

9.Replace each special symbol with # in the following string:

I/p string:Mary @always &stood fir!st in %class

O/P String: Mary #always #stood first in #class

```
import string

a = "Mary @always &stood fir!st in %class"
for i in string.punctuation:
    a=a.replace(i,"#")
print(a)
```

```
Mary #always #stood fir#st in #class
```

1. Write a program that takes a sentence as an input parameter where each word in the sentence is separated by a space. Then replace each blank with a hyphen and then print the modified sentence.

```
a = input("String:")
s =''
for i in a:
    if i!=' ':
       s+=i
    else:
        s+='-'
s
```

```
String:jv fjg
```

```
'jv-fjg'
```