

#1. Write a program to accept a string and calculate its length.

```
string = str(input("Enter string \n")); #Accept String
count = 0
for i in string: #Length Operation
    count=count+1
print("Length of string is",count) #Length of String
```

#2. Write a program to accept a string and reverse it.

```
def reverse(string): #Create a function for the reverse string
    str = ""
    for i in string: #Reverse string using for loop
        str = i + str
    return str
string = str(input("Enter String \n")); #Accept String
print("The original string is : ",string)
print("The reversed string(using loops) is : ",reverse(string), end="")
```

#3. Write a program to accept a string and a position P. Print the character at position P in the string.

```
string =str(input("Enter String \n")); #Accept String
```

```
c = str(input("Enter Alphabet \n")); # Character to find
```

```
res = 0
```

```
for i in range(0, len(string)): #Find character in string
```

```
if string[i] == c:
```

```
res = i
```

```
break
```

```
if res == 0:
```

```
print("No alphabet available in string") #If alphabet not available in  
string
```

```
else:
```

```
print("Character { } is present at { }".format(c, str(res)))
```

#4. Write a program to accept a string, a position P and a character T. Replace the character at position P in the string with character T.

```
string = str(input("Enter String")); #Accept String
```

```
position = int(input("Enter Position")); #Accept position
```

```
character = str(input("Enter String")); #Accept character
```

```
string = string[:position] + character + string[position+1:] #create new  
string using string slicing
```

```
print(string)
```

#5. Write a program to accept a string and check if all the characters in the string are alphabets.

```
import re #Import Re( regula expression)
String=str(input("Enter string \n")); #Accept String
match = re.match('^[a-zA-Z]+$', String ) #compare aplabhet with string
if match:
    print("The string contains only letters')
else:
    print("The string does NOT contain only letters')
```

#6. Write a program to accept a string and check if all the characters in the string are alphanumeric.

```
import re #Import Re( regula expression)
String=str(input("Enter string \n")); #Accept String
match = re.match('^[a-zA-Z0-9]+$',String ) #compare aplabhet and
numbers with string
if match:
    print("The string is alphanumeric")
else:
    print("The string is not alphanumeric")
```

#7. Write a program to accept a string and check if all the characters in the string are digits.

```
import re  #Import Re( regular expression)

String=str(input("Enter string \n")); #Accept String

match = re.match('[0-9]+$',String ) #compare aplabhet and numbers
with string

if match:

    print('The all character in the string are numbers')
else:

    print('The all character in the string are not numbers')
```

#8. Write a program to accept a string and starting with first character replace every alternate character with the '*' character.

```
string=str(input("Enter String")); #Accept String
```

```
ch=[]
```

```
for i in string: #Seperate string into array
```

```
    ch.append(i)
```

```
for j in range(1,len(ch),2): #Replace alternate character with *
```

```
    ch[j]="*"
```

```
s=""
```

```
for k in ch:
```

```
    s=s+k
```

```
print(s)
```

#9. Write a program to accept a string and replace every vowel in the string with the '*' character.

```
string=str(input("Enter String \n")); #Accept string
char="*"
newstr = ""
for i in range(len(string)):
    if string[i]=='a' or string[i]=='e' or string[i]=='i' or string[i]=='o' or
string[i]=='u' or string[i]=='A' or string[i]=='E' or string[i]=='I' or
string[i]=='O' or string[i]=='U':
        #Chech every character of string is vowels or not.
        newstr = newstr + char
    else:
        newstr = newstr + string[i]
print("String after replacing vowels to character", newstr)
```


#10. Write a program to accept a string and convert all its characters to upper case.

```
string=str(input("Enter String \n")); #Accept String
```

```
for i in range (0,len(string)):
```

```
    x=ord(string[i]) #ord used for get number of character
```

```
    if x>=97 and x<=122: #Compare characters number with the code
```

```
        x=x-32
```

```
    y=chr(x)
```

```
    print(y,end="")
```

#11. Write a program to accept a string and convert all its characters to lower case.

```
string = str(input("Enter String"));
```

```
out = "
```

```
for i in string:
```

```
    if i not in 'ABCDEFGHIJKLMNOPQRSTUVWXYZ':
```

```
        out = out + i
```

```
    else:
```

```
        k = ord(i)
```

```
        l = k + 32
```

```
        out = out + chr(l)
```

```
print(out)
```

#12. Write a program to accept a string STR1, starting position P and length L.

```
STR1=str(input("Enter string"));
P=int(input("Enter Position")); #Accept Position
L=int(input("Enter Length")); #ACcept Length
print(STR1[P:L+1])
```

#13.Extract from the given string STR, starting from position P, L characters into another string STR2. e.g. STR1="BATATA", P=2, L=4. Then STR2="ATAT".

```
STR1=str(input("Enter string"));
P=int(input("Enter Position")); #Accept Position
L=int(input("Enter Length")); #ACcept Length
STR2=STR1[P:L+1]
print(STR2)
```