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In [9]: #assignment 2:string and function
#write a python programe to check whethe the string is symmetrical or palindrom
s=input("enter string:")
n=len(s)
flag=0
if n%2==0:
    i=0
    i=n//2
    while i<n//2 and j<n:
        if s[i]==s[j]:
            i=i+1
            j=j+1
        else:
            flag=1
            break
    else:
        flag=1
if flag==0:
    print("symmetrical")
else:
    print("not symmetrical")

i=0
j=n-1
flag=0
while i<n:
    if(s[i]==s[n-1]):
        i=i+1
        j=j+1
    else:
        flag=1
        break
    if flag==10:
        print("string is palindrome")
    else:
        print("not palindrome")

enter string:madam
not symmetrical
```

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In [10]: #write a python program to reverse words in agivin string
s=input("enter string:")
w=s.split()
for s1 in w:
    for i in range(len(s1)-1,-1,-1):
        print(s1[i],end=" ")
        print(" ",end=" ")

enter string:gauri
i r u a g
```

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In [11]: #write a python program to remove 'i' th character from string in different ways
s=input("enter string")
i=int(input("enter i th position:"))
s1=s[0:i]+s[i+1:]
print("after removing i th character=",s1)

enter stringgauri
enter i th position:2
after removing i th character= gari
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In [28]: #write a python function to find the max of three number
def maximum(a,b,c):
    if a>b and a>c:
        print("greater no=",a)

    elif b>a and a>c:
        print("greater no=",b)

    else:
        print("greater no=",c)
maximum(30,50,60)

greater no= 60
```

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In [4]: #write a python function to sum all the number in a
total =0
list1=[11,5,17,18,23]
for ele in range(0,len(list1)):
    total=total+list1[ele]
    print( "sum of all elements in given list",total)

11
16
33
51
74
```

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In [5]: #write a python program to reverse a string
def reverse(s):
    str=""
    for i in s:
        str=i+str
    return str
s="gauri"
print("the original string is:",end="")
print(s)
print("the reversed string(using loops)is:",end="")
print(reverse(s))

the original string is:gauri
the reversed string(using loops)is:iruag
```

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In [9]: #write a python program to print even length words in a string
n="this is a python language"
s=n.split(" ")
for i in s:
    if len(i)%2==0:
        print(i)

this
is
python
language
```

```
In [11]: #write a python program to accept the strng which contains all vowelse
s=input("enter string:")
a=set([])
vowels={'a','e','i','o','u'}
for ch in s:
    a.add(ch)
    if len(a)==s:
        print("accepted")
    else:
        print("not accepted")

enter string:grfd
not accepted
not accepted
not accepted
not accepted
```

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In [12]: #write a python program to count the number of matching characters in a pair of string
s1=input("enter string 1:")
s2=input("enter string 2:")
a=set([])
for ch in s1:
    if ch in s2:
        a.add(ch)
        print("number of char same =",len(a))

enter string 1:gauri
enter string 2:bhand
number of char same = 1
```

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In [17]: #write a python function that takes a list and return a new list with unique elements of the first list
import numpy as np
def unique(list1):
    x=np.array(list1)
    print(np.unique(x))
list1=[10,20,30,10,20,40,50,10]
print("the unique values form list is")
unique(list1)

the unique values form list is
[10 20 30 40 50]
```

```
In [31]: #write a python function that takes a number as parameter and check the number is prime or not
def prime(num):
    count=0
    if num>1:
        for i in range(2,int(input("enter a number:"))+1):
            if i%num==0:
                count=count+1
                if count==2:
                    print("number is prime")
            else:
                print("not prime")
prime(4)

enter a number:4
not prime
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In [ ]:
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