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In [1]: #1. Write a python program to check whether the string is Symmetrical or Palindrome
def symmetrical(str1, str2):
    if str1 == str2:
        print("given string is Symmetrical")
    else:
        print("given string is Not Symmetrical")
def palindrome(str1, str2):
    if str1 == str2[::-1]:
        print("given string is Palindrome")
    else:
        print("given string is Not Palindrome")

str = input("Enter any string")
size = len(str)
mid = size // 2
if (size % 2 == 0):
    str1 = str[:mid]
    str2 = str[mid:]
else:
    str1 = str[:mid]
    str2 = str[mid+1:]
symmetrical(str1, str2)
palindrome(str1, str2)
```

```
Enter any stringcar
given string is Not Symmetrical
given string is Not Palindrome
```

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In [2]: #2. Write a python program to Reverse words in a given String
string = "I am a python programmer"
words = string.split()
words = list(reversed(words))
print(" ".join(words))
```

```
programmer python a am I
```

```
In [3]: #3. Write a python program to remove i'th character from string in different ways
def remove_char(s, i):
    a = s[:i]
    b = s[i+1:]

    return a+b

string = "Pythonisgood"
# Remove ith index element
i = 5
print(remove_char(string, i-1))
```

```
Pythnisgood
```

```
In [4]: #1. Write a Python function to find the Max of three numbers.
n1 = int(input("Enter first number: "))
n2 = int(input("Enter second number: "))
n3 = int(input("Enter Third number: "))
def max():
    if (n1 >= n2) and (n1 >= n3):
        l = n1
    elif (n2 >= n1) and (n2 >= n3):
        l = n2
    else:
        l = n3
    print("Largest number among the three is", l)
max()
```

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Enter first number: 1
Enter second number: 9
Enter Third number: 8
Largest number among the three is 9
```

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In [5]: #2. Write a Python function to sum all the numbers in a list.
def sum(numbers):
    total = 0
    for x in numbers:
        total += x
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        return total
    print(sum((8, 2, 3, 0, 7)))
```

20

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In [7]: #3. Write a Python program to reverse a string.
def reverse(str):
    str = str[::-1]
    return str

s = "Hello I am pratiksha"
print ("The original string is : ",s)
print ("The reversed string using extended slice operator is : ",reverse(s))
```

The original string is : Hello I am pratiksha
The reversed string using extended slice operator is : ahskitarp ma I olleH

```
In [8]: #1. Write a python program to print even length words in a string
def printWords(s):
    print(s)
    s = s.split(' ')
    for word in s:
        if len(word)%2==0:
            print(word)

s = "i am kalpita"
printWords(s)
```

Hello I am pratiksha
am

```
In [9]: #2. Write a python program to accept the strings which contains all vowels
def check(string):
    string = string.replace(' ', '')
    string = string.lower()
    vowel = [string.count('a'), string.count('e'), string.count('i'), string.count('o'), string.count('u')]

    if vowel.count(0) > 0:
        return('not accepted')
    else:
        return('accepted')

if __name__ == "__main__":
    string = input("Enter string:")
    print(check(string))
```

Enter string:mat
not accepted

```
In [10]: #3. Write a python program to Count the Number of matching characters in a pair of string
import re
ip1 = input("Enter string1:")
ip2 = input("Enter string2:")

c = 0
for i in ip1:
    if re.search(i,ip2):
        c=c+1
print("No. of matching characters are ", c)
```

Enter string1:car
Enter string2:mat
No. of matching characters are 1

```
In [11]: #1. Write a Python function that takes a list and returns a new list with unique elements of the first list
def f(list):

    a=set(list)

    print(sorted(a))
```

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f([1,1,1,2,3,4])
```

```
[1, 2, 3, 4]
```

In [12]:

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#2. Write a Python function that takes a number as a parameter and check the number is prime or not
def PrimeChecker(a):
    if a > 1:
        for j in range(2, int(a/2) + 1):
            if (a % j) == 0:
                print(a, "is not a prime number")
                break
        else:
            print(a, "is a prime number")
    else:
        print(a, "is not a prime number")
a = int(input("Enter an input number:"))
PrimeChecker(a)
```

Enter an input number:2

2 is a prime number

In [13]:

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#1. Write a Python program to append items from a specified list.
input = [1, 2, 3, 4, 5]
key = 5

result = []
for ele in input:
    result.append(ele)
    result.append(key)

print(result)
```

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[1, 5, 2, 5, 3, 5, 4, 5, 5, 5]
```

In [14]:

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#2. Write a python program Check if a Substring is Present in a Given String
def check(string, sub_str):
    if (string.find(sub_str) == -1):
        print("NO")
    else:
        print("YES")

# driver code
string = "Hello Tybcs welcome"
sub_str = "Tybcs"
check(string, sub_str)
```

YES

In [15]:

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#3. Write a python program Words Frequency in String Shorthands
def freq(str):
    str = str.split()
    str2 = []
    for i in str:
        if i not in str2:
            str2.append(i)
    for i in range(0, len(str2)):
        print('Frequency of', str2[i], 'is :', str.count(str2[i]))
def main():
    str = 'apple mango apple orange orange apple guava mango mango'
    freq(str)

if __name__ == "__main__":
    main()
```

Frequency of apple is : 3

Frequency of mango is : 3

Frequency of orange is : 2

Frequency of guava is : 1

In []:

