

#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 stringmadam
given string is Not Symmetrical
given string is Palindrome
```

#2. Write a python program to Reverse words in a given String

```
string = "its kalpesh "
words = string.split()
words = list(reversed(words))
print(" ".join(words))
```

```
kalpesh its
```

#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 = "i want car"
# Remove ith index element
i = 7
print(remove_char(string,i-1))
```

```
i wantcar
```

set B functions

#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()
```

```
Enter first number: 7
Enter second number: 12
Enter Third number: 25
Largest number among the three is 25
```

#2. Write a Python function to sum all the numbers in a list.

```
def sum(numbers):
    total = 0
    for x in numbers:
        total += x
    return total
print(sum((8, 2, 3, 0, 7)))

20
```

#3. Write a Python program to reverse a string.

```
def reverse(str):
    str = str[::-1]
    return str

s = "these is reverse string example"
print ("The original string is : ",s)
print ("The reversed string using extended slice operator is : 
",reverse(s))

The original string is : these is reverse string example
The reversed string using extended slice operator is : elpmaxe
gnirts esrever si eseht
```

set B (strings)

#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 = "the example of string counting"
    printWords(s)

```

these is reverse string example
is
string

#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:kalpesh
not accepted

#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:am in heaven
Enter string2:i am in heaven
No. of matching characters are 12

set B (Functions)

#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))
```

```
f([78,75,78,78,45,75,12,78])
```

```
[12, 45, 75, 78]
```

#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:7
```

```
7 is a prime number
```

#3. Write a Python function to check whether a number is perfect or not

```
n = int(input("Enter any number: "))
```

```
sum1 = 0
```

```
for i in range(1, n):
```

```
    if(n % i == 0):
```

```
        sum1 = sum1 + i
```

```
if (sum1 == n):
```

```
    print("The number is a Perfect number!")
```

```
else:
```

```
    print("The number is not a Perfect number!")
```

```
Enter any number: 78
```

```
The number is not a Perfect number!
```