# Q1. WAP to input 2 strings and swap the strings

In [4]:
```
s1=input("enter 1st string: ")
s2=input("enter 2nd string: ")
print("---------------------")
print("string before swapping: ","s1=",s1,"s2=",s2)
s1,s2=s2,s1
print("                       ")
print("string after swapping:","s1=",s1,"s2=",s2)
```

```
enter 1st string: Pratiksha
enter 2nd string: Ghare
---------------------
string before swapping:  s1= Pratiksha s2= Ghare

string after swapping: s1= Ghare s2= Pratiksha
```

# Q2. WAP to generate 4 random numbers in the range 0-26 and print their average

In [44]:
```
import random
sum=0
print("Below are the 4 random numbers :")
for i in range(4):
    r1=random.randint(0,26)
    sum=sum+r1
    print(r1)
print("sum of random number=",sum)
avg=sum/2
print("Average of random number=",avg)
```

```
Below are the 4 random numbers :
22
17
9
3
sum of random number= 51
Average of random number= 25.5
```

# Q3. WAP to generate and print a random uppercase or lower uppercase alphabet create a string containing all alphabets and then select a random alphabet.check the module string

In [82]:
```
import random
import string

#a_list contain all uppercase alphabets
print("Uppercase charachter")
a_string=string.ascii_uppercase
```

```
print(" string contain alphabets",a_string.isalpha(),'\n')
a_list=list(a_string)
print(a_list)


#b_list contain all lowercase alphabets
print("                    ")
print("lowercase character")
b_string=string.ascii_lowercase
print(" string contain alphabets",b_string.isalpha(),'\n')
b_list=list(b_string)
print(b_list)

#rr contain upper as well as lower alphabets
rr=random.choice(string.ascii_letters)
print("\nrandom alphabet can be lower or upper: ",rr)

print(" string contain alphabets",rr.isalpha(),'\n')
```

```
Uppercase charachter
 string contain alphabets True

['A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M', 'N', 'O', 'P',
'Q', 'R', 'S', 'T', 'U', 'V', 'W', 'X', 'Y', 'Z']

lowercase character
 string contain alphabets True

['a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j', 'k', 'l', 'm', 'n', 'o', 'p',
'q', 'r', 's', 't', 'u', 'v', 'w', 'x', 'y', 'z']

random alphabet can be lower or upper:  t
 string contain alphabets True
```

# Q4.WAF get_si() that takes principle, Rate and Time as arguments and returns the simple intrest

In [90]:

```
def get_si(p,r,t):
    s_intrate=(p*t*r)/100
    print("simple intrest rate is =",s_intrate)
get_si(100,2,3)
```

```
simple intrest rate is = 6.0
```

# Q5. WAF get_amount() that takes principle, Rate and Time as arguments and returns the total amount using the get_si() function from above to calculate the SI. Also provide rate 10 and time =1 as default argument

In [99]:

```
def get_amount(p,r=10,t=1):
    Amount = p * (pow((1 + r //100),t))
    print("Simple intrest rate amount = ",Amount)
```

```
    return get_si(100,2,3)
get_amount(100)
```

```
Simple intrest rate amount =  100
simple intrest rate is = 6.0
```

# Q6. WAF get_ci() that takes principle, Rate and Time as arguments and returns the compound intrests

In [105…

```
def get_amount(p,r,t):
    Amt = p * (pow((1 + r /100),t))
    CI = Amt- p
    print("Compound intrest is =",CI)
get_amount(500,2,3)
```

```
Compound intrest is = 30.604000000000042
```

# Q7. WAF get_q_r() taking 2 numbers are parameters and returns the quotient and remainder in the form of a tuple

In [124…

```
def get_q_r(n1,n2):
    q=n1//n2
    r=n1%n2
    print("n1=",n1,"and n2=",n2," quotient and remainder of these number"
          '\n'"respectively")
    return q,r
get_q_r(5,3)
```

```
n1= 5 and n2= 3  quotient and remainder of these number
respectively
```

Out[124… (1, 2)

# Q 8. WAF to find the length of hypotenuse of right angled traingle ,input the height and base from user.

In [125…

```
import math
def hyptraingle():
    b=float(input("enter a base:"))
    h=float(input("enter a height:"))
    c = math.sqrt(b ** 2 + h ** 2)
    print("Hypotenuse is: ",c)
hyptraingle()
```

```
enter a base:12
enter a height:23
Hypotenuse is:  25.942243542145693
```

# Q9. WAF to input number of seconds and

# print in days ,hours,minutes and seconds

In [ ]:
```
sec=int(input("Enter number of seconds : "))
seconds_in_day = 60 * 60 * 24
seconds_in_hour = 60 * 60
seconds_in_minute = 60

days = sec // seconds_in_day
hours = (sec - (days * seconds_in_day)) // seconds_in_hour
minutes = ((sec - (days * seconds_in_day) - (hours * seconds_in_hour))//60)
print(days,"days",hours,"hours",minutes,"minutes")
```

# Q10.Check your version of python interpreter

In [5]:
```
from platform import python_version
print(python_version())
```

```
3.8.8
```

# Q11. Find output

In [2]:
```
x=2
x*=3
x=x%4
y=-x
print(x,y)
```

```
2 -2
```