3-10-2024

Training Day - 13

```
# #New Program
# user_input = input("Enter the number with separated space:")    #"10 20 30 40 50"
# user_list = user_input.split() # convert into list, ["10","20"...
# print(user_list)
# for i in range(len(user_list)):     #i=0,1,2,3,4
# # convert each element into integer
#     user_list[i]= int(user_list[i])     #user_list[i]: "10"
# print("No are:",user_list)


# r =0
# for x in range(len(user_list)+1): #i=1, 2...7
# if(x==5):
# continue
# t=x**2 #t=1sq, 2sq # r=r+t #r=0+1sq=1sq, r=1sq+2sq, 1sq+2sq+...7sq


# #New Program
# L1=[10,20,30]       #index 0,1,2
# L2=[100,200,300]    #index 0,1,2
# L3=[30,40,50]       #index 0,1,2
# for i in range(len(L1)):      #range(3), i=0,1,2
#     print(L1[i]+L2[i]+L3[i])

# #New Program
# id_list=[10,20,30]                    #index=0,1,2
# name_list=["Vikas","Anil","Amit"]       #index=0,1,2
# age_list=[39,41,45]                    #index=0,1,2
# for i in range(len(id_list)):       #range(3), i=0,1,2
#     print("Cust ID:",id_list[i],"Cust Name:",name_list[i],"Cust Age:",age_list[i])


Check whether a number input by user is a Prime no or not?
"""
#BLL
def checkPrime(no):     #no=11
    for i in range(2,no):       #i=2, 3
        if(no%i==0):
            return "not Prime"
    return "Prime"
```

```
# #PL
# no=int(input("Enter any number:"))      #no=9
# res=checkPrime(no)
# print("The entered no is:",res)
```

 # #Find all the primary and non-primary numbers in a given limit:

```
# no_low=int(input("Enter lower limit:"))      #7
# no_high=int(input("Enter higher limit:"))    #13
# for no in range(no_low,no_high+1):  #no=7 to 13
#     res=checkPrime(no)
#     print("The no",no,"is",res)
```

 # #New Program: Check all Prime nos in a given list

```
# #BLL
# def checkAllPrime(no_low,no_high):
#     L=[]
#     for no in range(no_low,no_high+1):        #no=7,8,9,...13
#         for i in range(2, no):  # i=2, 3,4,5,6, no=7
#             if (no % i == 0):
#                 break
#         else:
#             L.append(no)        #L=[7,11]
#     return L
#
# #PL
# no_low=int(input("Enter lower limit:"))      #7
# no_high=int(input("Enter higher limit:"))    #13
# res=checkAllPrime(no_low,no_high)
# print("The Prime Nos are:",res)
```

```
*
**
***
****
*****
```

Step 1: No of lines:5, so exteranl loop will run for 5 times

```
n=5
for i in range(5):
```

Step 2:

Table:

i	n	j_range
0	5	1
1	5	2
2	5	3

3 5 4
4 5 5
no Python, maths starts:
Find relation between j_range and i and n:
j_range=i+1

"""
```
# #New Program
# for i in range(5):          #i=0, i=1
#     for j in range(4):      #i=0,j=0,1,2,3  i=1,j=0,1,2,3
#         print("*",end="")
#     print()

# #New Program
# for i in range(5):          #i=0, i=1,...4
#     for j in range(i+1):
#         print("*",end="")
#     print()
```