

PROBLEM 1

Given two integer numbers returns their product only if the product is equal to or lower than 1000 else return their sum

```
num1=float(input("Enter the first number"))
num2=float(input("Enter the second number"))
pro=num1*num2
sum=num1+num2
if(pro>1000):
    print("Sum = ",sum)
else:
    print("Product = ",pro)
```

Sum = 622.0

PROBLEM 2

Write a function to return True if the first and last number of agiven list is same.If the numbers are different then return false

```
numbers_x=[10,20,30,40,10]
numbers_y=[75,65,35,75,30]
if(numbers_x[0]==numbers_x[-1]):
    {
        print("Given list",numbers_x,"\n True")
    }
else:
    {
        print("Given list",numbers_x,"\n False")
    }
if(numbers_y[0]==numbers_y[-1]):
    print("Given list",numbers_y,"\n True")
else:
    print("Given list",numbers_y,"\n False")
```

Given list [10, 20, 30, 40, 10]
True
Given list [75, 65, 35, 75, 30]
False

PROBLEM 3

Iterate the given list of numbers and print only those numbers which are divisible by 5

```
list1=[10,20,33,46,55]
print("Given List ",list1)
for i in list1:
    if i%5==0:
        print(i)
```

Given List [10, 20, 33, 46, 55]

10
20
55

PROBLEM 4

Write a program to find how many times substring "Emma" appears in the given string

```
str_x= "Emma is good developer. Emma is a writer"
print("Emma appeared" ,str_x.count("Emma"),"times")
```

Emma appeared 2 times

PROBLEM 5

Print the following pattern

1

2 2

3 3 3

4 4 4 4

5 5 5 5 5

```
for i in range(1,6):
    print(" ")
```

```
for j in range(1,i+1):  
    print(i,end=" ")
```

```
1  
2 2  
3 3 3  
4 4 4 4  
5 5 5 5 5
```

PROBLEM 6

Create a new list from a two list using the following condition

Given a two list of numbers,write a program to create a new list such that the new list should contain odd numbers from the list and even numbers from the second list

```
list1=[10,20,25,30,35]  
list2=[40,45,60,75,90]  
list3=[]  
for i in list1:  
    if i%2!=0:  
        list3.append(i)  
for i in list2:  
    if i%2==0:  
        list3.append(i)  
print("result list :",list3)
```

result list : [25, 35, 40, 60, 90]