ASSIGNMENT / TASK 1

1. We are having 3 list like this

Colors = [“Yellow”,”Green”,”White”,”Black”]

Fruits=[“Apple”,”Papaya”,”Mango”,”Orange”]

Animals=[“Tiger”,”Lion”,”Deer”,”Zebra”]

i. Write a program that asks user to enter a Color/Fruit/Animal name and it should tell which category belongs to , like its is a fruit or color or Animal

```
Colors=["Yellow","Green","White","Black"]
Fruits=["Apple","Papaya","Mango","Orange"]
Animals=["Tiger","Lion","Deer","Zebra"]
a=input("Enter any fruit/color/animal\n")
if a in Fruits:
  print("Category: fruit")
elif a in Colors:
  print("Category: colors")
else:
  print("Category: Animal")
```

```
Enter any fruit/color/animal
Papaya
Category: fruit
```

ii. Write a program that asks user to enter two items and it tells you if they both are in same category or not. For example if I enter yellow and Black, it will print "Both are colors" but if I enter yellow and Tiger it should print "They don't belong to same category"

```
a=input("Enter any fruit/animal/color\n")
b=input("Enter any fruit/animal/color\n")
if a in Colors and b in Colors:
  print("Both are Colors\n")
```

```
    print("Both are colors\n")
elif a in Fruits and b in Fruits:
  print("Both are fruits\n")
else:
  print("Both are animals\n")
```

```
Enter any fruit/animal/color
Apple
Enter any fruit/animal/color
Papaya
Both are fruits
```

2. Write a python program that can tell you if your grade score good or not . Normal Score range is 40 to 60.

i. Ask user to enter his score.

ii. If it is below 40 to 60 range then print that score is low

iii. If it is above 60 then print that it is good otherwise print that it is normal

```
score=int(input("Enter your score\n"))
if score in range(40,61) or score<40:
  print("Score is low\n")
elif score>60:
  print("Score is Good\n")
else:
  print("Score is normal\n")
```

```
Enter your score
22
Score is low
```

3. After appearing in exam 10 times you got this result,

result = ["Pass","Fail","Fail","Pass","Fail","Pass","Pass","Fail","Fail","Fail"]

Using for loop figure out how many times you got Pass

```
result=["Pass","Fail","Fail","Pass","Fail","Pass","Pass","Pass","Fail","Fail","Fail"]
c=0
```

```
for i in result:
  if i=="Pass":
    c=c+1
print(c)
```

```
5
```

4. Write a program that prints following shape

```
*

**

***

****

*****

****

***

**

*
```

```
for i in range(6):
  for j in range(i):
    print("*",end="")
  print()
for i in range(0,4):
  for j in range(4-i):
    print("*",end="")
  print()
```

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

```
**
*
```

5. Lets say you are running a 50 km race. Write a program that, Upon completing each 10 km asks you "are you tired?"

If you reply "yes" then it should break and print "you didn't finish the race"

If you reply "no" then it should continue and ask "are you tired" on every km

If you finish all 50 km then it should print congratulations message

```
for i in range(0,51,10):
  answer=input("Are You Tired?")
  if answer.lower()=="yes":
    print("You did't finish the race")
    break
  elif answer.lower()=="no":
    continue
  else:
    print("Congratulations")
```

```
Are You Tired?No
Are You Tired?yes
You did't finish the race
```

6. Write a Python program to find those numbers which are divisible by 7 and multiple of 5, between 1500 and 2700 (both included).

```
for i in range(1500,2701):
  if i%7==0 and i%5==0:
    print(i,",",end="")
```

```
1505 ,1540 ,1575 ,1610 ,1645 ,1680 ,1715 ,1750 ,1785 ,1820 ,1855 ,1890 ,1925 ,1960 ,199
```

7. Print square of all numbers between 10 to 20 except even numbers

```
for i in range(10,21):
  if i%2!=0:
    print(i*i)
```

```
121
169
225
289
361
```

8. Your Marks for five Test(test1 to test5) looks like this,

marks_list = [65, 75, 2100, 95, 83]

Write a program that asks you to enter marks and program should tell you in which test that marks occurred. If marks is not found then it should print that as well.

```
marks_list=[65,75,2100,95,83]
marks=int(input("Enter your marks"))
c=0
for i in marks_list:
  if i==marks:
    c=c+1
    print("Marks occured in test",c)
  else:
    c=c+1
if marks not in marks_list:
  print("Not Found")
```

```
Enter your marks75
Marks occured in test 2
```