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1. We are having 3 list like this

```
In [2]: Colors = ['Yellow', 'Green', 'White', 'Black']  
  
        Fruits=['Apple', 'Papaya', 'Mango', 'Orange']  
  
        Animals=['Tiger', 'Lion', 'Deer', 'Zebra']
```

Question:-1 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

```
In [3]: user_input = input('enter a Color/Fruit/Animal name')  
        if user_input in Colors:  
            print('it is a Color')  
        if user_input in Fruits:  
            print('it is a Fruit')  
        if user_input in Animals:  
            print('it is a Animals')
```

```
enter a Color/Fruit/Animal nameDeer  
it is a Animals
```

Question:2 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"

```
In [4]: user_input1,user_input2 = input('from Color/Fruit/Animal enter any two name').
split()
if (user_input1 in Colors and user_input2 in Colors):
    print('Both are color')
elif (user_input1 in Fruits and user_input2 in Fruits):
    print('Both are fruit')
elif (user_input1 in Animals and user_input2 in Animals):
    print('Both are animal')
else:
    print("They don't belong to same category")
```

```
from Color/Fruit/Animal enter any two nameTiger Lion
Both are animal
```

Question:3 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

```
In [5]: user_input =int(input('enter your score'))
if user_input < 40:
    print('score is low')
elif user_input > 60:
    print('score is good')
else:
    print('score is normal')
```

```
enter your score50
score is normal
```

Question:4 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

```
In [6]: result = ["Pass","Fail","Fail","Pass","Fail","Pass","Pass","Fail","Fail","Fail"]
c=0
for r in result:
    if r == 'Pass':
        c = c + 1
print(c)
```

4

Question:5 Write a program that prints following shape

```
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```
In [11]: t=2
for i in range(1,10):
    if i > 5:
        i = i - t
        t = t + 2
    for j in range(i):
        print('*', end = '')
    print()
```

```
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```

Question:6 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

```
In [12]: p = 50
km = 0
mark = 10
while p > 0:
    km = km + 1
    p = p - 1
    if km == mark:
        reply = input('are you tired?')
        if reply == 'yes':
            print("you didn't finish the race")
            break
        if reply == 'no':
            mark = mark + 1
```

```
are you tired?no
are you tired?no
are you tired?no
are you tired?yes
you didn't finish the race
```

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

```
In [13]: for i in range(1500,2701):  
        if i % 7 == 0:  
            print(i)  
        if i % 5 == 0:  
            print(i)
```

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Question:8 Print square of all numbers between 10 to 20 except even numbers

```
In [14]: for i in range(10,21):  
        if i % 2 == 0:  
            pass  
        else:  
            print(i*i)
```

121
169
225
289
361

Question:9 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.

```
In [21]: marks_list = [65, 75, 2100, 95, 83]  
suyash = int(input("Enter marks: "))  
if suyash in marks_list:  
    print("Test",marks_list.index(suyash))  
else:  
    print("Not found")    #started at 0 index
```

Enter marks: 83
Test 4

Thank You