PROGRAMMING WITH PYTHON

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OUTLINE

- If .....
- If .... Else
- if....elif.....else....
- Applications

IF..... STRUCTURE (1-SIMLPE CONDITION)

if (condition):

    -statement 1

    -statement 2

    -........

EXAMPLE-1

```python
x=int(input("X = "))
y=int(input("Y = "))
if x<y:
    print(x,"<",y," is True")
if x>y:
    print(x,">",y," is True")
if x==y:
    print(x,"=",y," is True")
```

The program checks just one condition

IF…ELSE….(2. SIMPLE ITERATIVE CONDITION)

if (condition):

-statement 1

-statement 2

-……

else:

-statement 1

-statement 2

-……

This bloc of instruction is run when the **condition is TRUE**

This bloc of instruction is run when the **condition is False**

EXAMPLE-2

```python
x=int(input("X = "))
y=int(input("Y = "))
if x<y:
    print(x,"<",y)
else:
    print(x,">=",y)
```

IF...ELIF....ELSE (3-COMPLEX ITERATIVE CONDITION)

if (condition-1):

    -statement 1

    -statement 2

> This bloc of instruction is run when **condition-1 is TRUE**

elif (sub-condition-1):

    -statement 1

    -statement 2

> This bloc of instruction is run when **sub-condition1 is True**

else:

    -statement 1

    -statement 2

> This bloc of instruction is run when **all preview conditions are False**

EXAMPLE-3

```python
x=int(input("X = "))
y=int(input("Y = "))
if x<y:
    print(x,"<",y," is True")
elif x==y:
    print(x,"=",y," is True")
else:
    print(x,">",y," is True")
```

APPLICATION -1

Write a program that receives as input a number and returns the color according to the following table:

Number	Color
0	Black
1	White
2	Yellow
3	Red
4	Green
5	Blue
6	Brown

APPLICATION -2

Write a program that receives as input two numbers and returns the maximum of these numbers

APPLICATION -3

Write a program that receives as input two numbers X and Y and displays the result of comparison between X and Y:

X = Y or X<Y or X>Y