Tutorial

CPSC 217

Relational Operator

- > (greater than)
- < (less than)
- <= (greater than equal)
- >= (less than equal)
- == (equal testing)
- != (Not equal testing)

- They return either True or False

Logical operator

- and
- or
- not

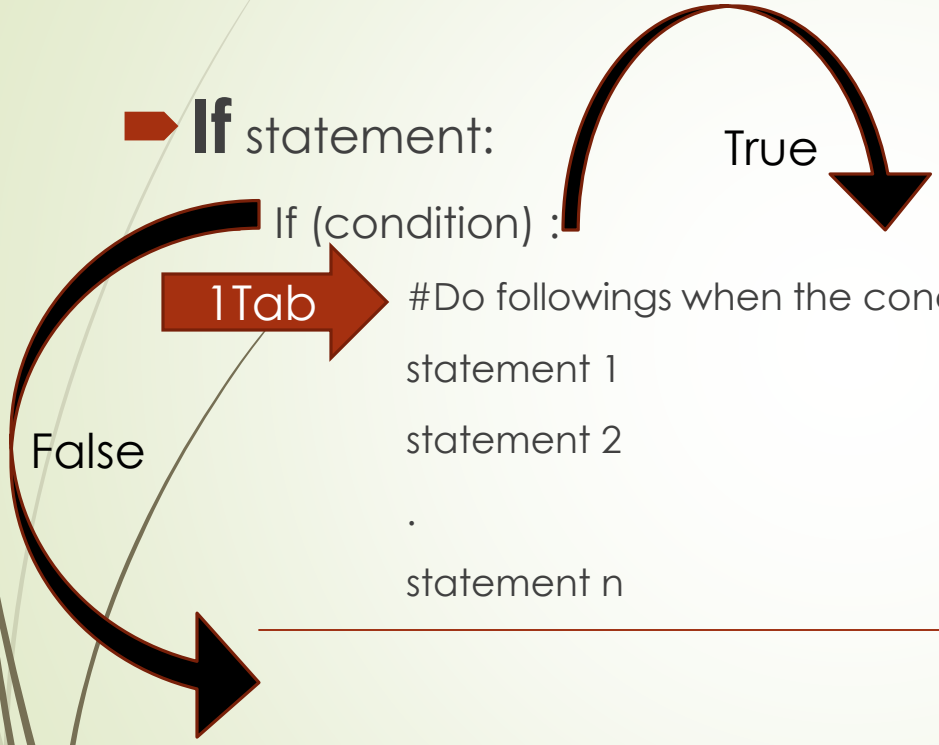
A	B	A and B
T	T	T
T	F	F
F	T	F
F	F	F

A	B	A or B
T	T	T
T	F	T
F	T	T
F	F	F

A	not(A)
T	F
F	T

Making decisions in Python (if… statement)

- **If** statement:



Making decisions in Python (if… statement)

- Try to understand following codes:

```
num = float(input("Enter any real number : "))

if (num < 0) :
        print('The given number is negative...')

if (num > 0) :
        print('The given number is positive...')

if (num == 0) :
        print('The given number is neutral...')

if (num != 0) :
        print('The given number is nonzero...')

if (num >= 0 and num <= 100) :
        print('The given number is within 0 to 100...')

if (num < 0 or num > 100) :
        print('The given number is not within 0 to 100...')
```

Making decisions in Python (if… statement)

- What will be the output of the previous program for the input 23?
- What will be the output of the previous program for the input 0?
- What will be the output of the previous program for the input 1234?

Making decisions in Python (if… statement)

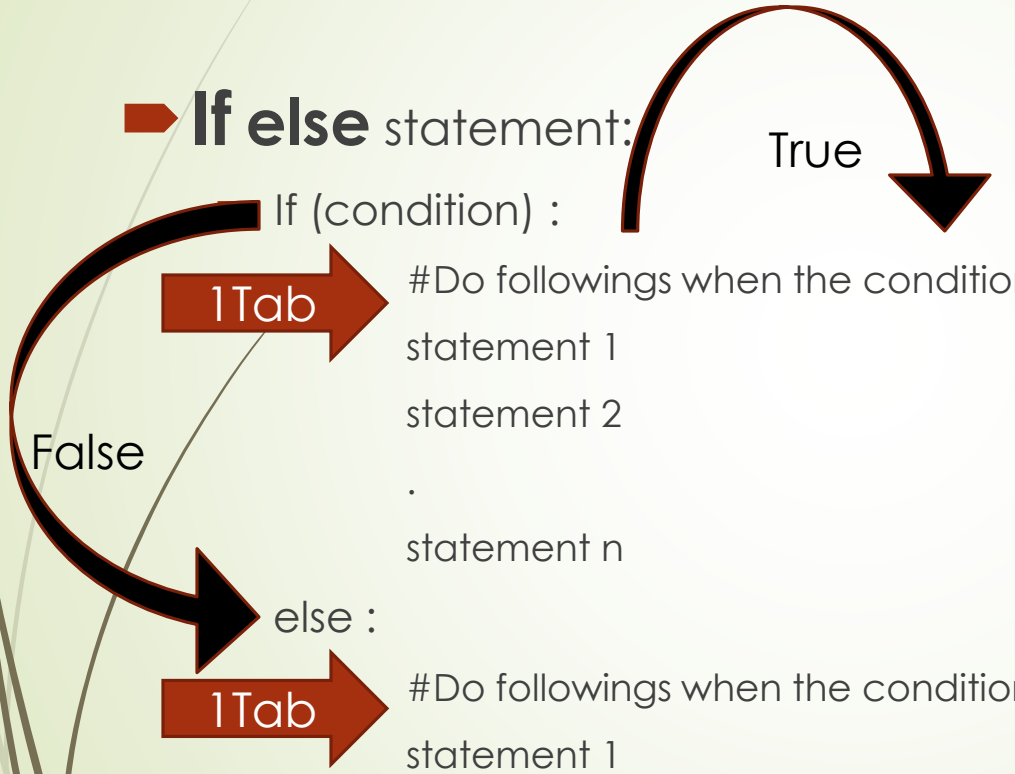
- WAP that will take an integer number ,and shows following outputs according to inputs.
  - When the input is 1 then the program should print “Sunday”.
  - When the input is 2 then the program should print “Monday”.
  - Same way for 3, 4, 5, 6 and 7, the outputs will be “Tuesday” , “Wednesday”, “Thursday”, “Friday” and “Saturday”.
  - When the input is any number that is not within 1 to 7, then show the message “Incorrect input”.

Practice 1:

- WAP that takes two numbers, and find the maximum number among them and Show it. If they are equal then show the message “They are equal”.

Making decisions in Python (if…else… statement)

- **If else** statement:



Try the following program

- WAP a program that will find whether an integer is even or odd.

```
num = float(input("Enter a number : "))

if (num % 2 == 0) :
        print("The number is even...")
else:
        print("The number is odd...")
```