# Decision Making

In python we can make decisions using the below cases:

* If statement
* If else statements
* If elif ladder
* Nested if statements
* Shorthand if statement
* Shorthand if else statement

If statement

It is the simplest decision making statement in python programming.

If the condition holds true, the body statements would be executed.

If it is false, goes to the other statements outside of if block

## If else statements

If the condition is true, the statements inside get executed

Or if the condition is false, it goes to else directly.

After either if or else is executed, the statements out side of if block get executed.

## If elif ladder

If the condition holds true, it executes if condition’s body & doesn’t check the elif conditions at all.

If the condition is false, it checks the next elif condition –it it’s true, executes it’s body else checks the next elif condition

And this happens till any one of elif condition is true, if any one of elif condition holds true, it doesn’t check the further conditions (including else also)

If all the if & elif conditions are false, the else statement would be executed.

And comes out of the block & executes the rest.

## Nested if

We can write another if condition inside of if condition.

If the above if statement holds true, the inside if condition gets chance else it doesn’t get chance to be checked.

## Shorthand if

If only single condition is there, we can write the condition & print statement in single line

Like:

if 33>20: print (‘true’)

## Shorthand if else

If you have only one statement to execute, one for if, and one for else, you can put it all on the same line:

Like:

Print (“true”) if 33<20 else print(“false”)

## Note:-

The statements must follow the indentation(whitespace) rules, else it gives indentation error.

Other languages use {} curly braces for this.