Conditional If Statement

To write programs, you need to be able to make decisions. Programmers have a special term for decision making abilities: Control structures. A control structure determines whether a computer continue to operate on a set of data or exit out branch

Decisions Inside a Computer program

A computer can take actions based on simple comparisons.

age = int(input ("Enter your age")

if age > 26:

print("you are not allowed to be registered for selection service" )

The example compares age to the number 26. If age is greater than 26, it executes the print statement, Otherwise, it skips that statement. The general syntax of if statement is as follows:

If condition:

Indented\_statment(s)

Conditional and Boolean Operators

Python has a set of comparison operators as well as Boolean operators that enable you to combine conditions,

The Boolean operators ( and, or, not) have lower precedence than the comparison operators(==, >, <, >=, <=, !=), so you can confidently write if conditions as follows:

If n > 0 and n < 5:

Print (‘n is in range of 1 to 5)

The if, elif, and else key words

There is still more you can do with control structures involving the if-key word. Suppose you want to respond differently to service of alternative conditions. You can create such structure with the help of elif and else clauses.

The full syntax of if is actually as follows: if condition:

indented\_statement(s)

[elif condition:

indented\_statement(s) ]

[else:

indented\_statements ]

An if control structure must have one if clause.

It can then have zero or more elif clauses (each with its own condition), and it can have at most one else clause.

Here is an example:

if n < 1:

print('n is below range of 100')

elif n < 101:

print('n is inside the range')

print("Thank you!")

else:

print(' n is above the the range 1 to 100')

What the elif clause does – in this case there is exactly one – is to test for an alternative condition if the first condition (n < 1) fails.

If all conditions fail and if there is an else clause, the statement or statements following else are executed