Introduction to Programming: 4th lesson – Conditions & Conditional Statements

Conditions:

* Statements that either True or False, usually writing conditions to compare different values.
* Example 1:

print(2 > 3)

False

* Example 2:

var\_one = 1

var\_two = 2

print(var\_one < 1)

print(var\_two >= var\_one)

False

True

Conditional operation indicators:

1} Equals (==)

2} Does not equal (!=)

3} Less than (<)

4} Less than or equal to (<=)

5} Greater than (>)

6} Greater than or equal to (>=)

Conditional statements:

* Conditions to modify how that function runs, e.g., checking the value of a condition, and if the condition evaluates to True, then a certain block of code is executed. Otherwise, if the condition is False, then the code is not run.
* “if” statements:

def evaluate\_temp(temp):

# Set an initial message

message = “Normal temperature.”

# Update value of message only if temperature greater than 38

if temp > 38:

message = “Fever!”

return message

print(evaluate\_temp(37))

Normal temperature.

print(evaluate\_temp(39))

Fever!

* “if… else” statements:

def evaluate\_temp\_with\_else(temp):

if temp > 38:

message = “Fever!”

else:

message = “Normal temperature.”

return message

print(evaluate\_temp\_with\_else(37))

Normal temperature.

* “if… elif… else” statements:

def evaluate\_temp\_with\_elif(temp):

if temp > 38:

message = “Fever!”

elif temp > 35:

message = “Normal temperature.”

else:

message = “Low temperature.”

return message

evaluate\_temp\_with\_elif(36)

‘Normal temperature.’

evaluate\_temp\_with\_elif(34)

‘Low temperature.’