1. Boolean Data Type has 2 values which is either True & False. For Example:

1! =2 will result True

1==1 will give False

1. And, OR, Not are 3 different Boolean Operators.
2. Truth Table for AND Operator:

|  |  |  |
| --- | --- | --- |
| True | True | True |
| True | False | False |
| False | True | False |
| False | False | False |

Truth Table for OR Operator:

|  |  |  |
| --- | --- | --- |
| True | True | True |
| True | False | True |
| False | True | True |
| False | False | False |

Truth Table for NOT Operator:

|  |  |
| --- | --- |
| NOT True | False |
| NOT False | True |

1. (5 > 4) and (3 == 5) -🡪 False

not (5 > 4) 🡪 False

(5 > 4) or (3 == 5) -🡪 True

not ((5 > 4) or (3 == 5)) 🡪False

(True and True) and (True == False) 🡪 False

(not False) or (not True) 🡪 True

1. Six Comparison Operators in Python are-

Greater than(>)

Less than(<)

Equal to(==)

Greater than or Equal to(>=)

Less than or Equal to(<=)

Not Equal to(!=)

1. Assignment Operator(=) assigns the value to any variable. As a=10, here the memory block of name a has value 10. Where as Equal to (==) operator compares left hand value with right hand value as 2==3, Here check is performed if 2 is equal to 3, result will be False.
2. spam = 0

if spam == 10:

|  |
| --- |
| print(&#39;eggs&#39;) |

First Block

if spam> 5:

|  |
| --- |
| print(&#39;bacon&#39;) |

Second Block

else:

|  |
| --- |
| print(&#39;ham&#39;)  print(&#39;spam&#39;)  print(&#39;spam&#39;) |

Third Block

1. Write code that prints Hello if 1 is stored in spam, prints Howdy if 2 is stored in spam, and prints Greetings! if anything else is stored in spam.

spam=int(input("Enter Spam Value"))

if spam==1:

print ("Hello")

elif spam==2:

print ("Howdy")

else:

print ("Greetings!")

1. CTRL+C is pressed if the programme is stuck in endless infinite loop.
2. Break & Continue statements are the two Contradictory statements in python. Break statements terminates the loop immediately & the set of codes written after the body of loop starts to execute. Continue statements skips the body of the loop after the continue statement & keeps on executing the loop until the condition is met.

For example:

while(True):

a=int(input('Enter the Number'))

if a>100:

print('congrats you have entered a number greater than 100')

break

else:

print(a)

continue

print('the entered number is less than 100')

1. There is no difference in range(10),range(0,10) & range(0,10,1) . All 3 will print the number from 0-9.
2. *1-10 using For Loop-*

for i in range(11):

print (i)

*1-10 using while loop-*

i=0

while i<=10:

print(i)

i+=1

1. import spam as s

s.bacon()