1.What are the two values of the Boolean data type? How do you write them?

True

False

2. What are the three different types of Boolean operators?

and

or

not

3. Make a list of each Boolean operator's truth tables (i.e. every possible combination of Boolean values for the operator and what it evaluate ).

Truth tables:

|  |  |  |  |
| --- | --- | --- | --- |
| x1 | x2 | And | or |
| 0 | 0 | 0 | 0 |
| 0 | 1 | 0 | 1 |
| 1 | 0 | 0 | 1 |
| 1 | 1 | 1 | 1 |

|  |  |
| --- | --- |
| x | not |
| 0 | 1 |
| 1 | 0 |

4. What are the values of the following expressions?

(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

5. What are the six comparison operators? =,!=,>,<,<=,>=

6. How do you tell the difference between the equal to and assignment operators?Describe a condition and when you would use one.

To assign a value in variable we use assignment operator(=). Ex a=1

To compare the values we use equal operator(==) . Ex if(a==b) True where a=1, b=1

7. Identify the three blocks in this code:

spam = 0

#Block 1

if spam == 10:

print('eggs')

#Block 2

if spam > 5:

print('bacon')

#Block 3

else:

print('ham')

print('spam')

print('spam')

8. 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.

if(spam==1):

print(“Hello”)

else if(spam==2):

print(“Howdy”)

else:

print(“Greetings!”)

9.If your programme is stuck in an endless loop, what keys you’ll press?

Pause or Ctrl + C

10. How can you tell the difference between break and continue?

Break : exit the block

Continue : to skip some statements or codes

11. In a for loop, what is the difference between range(10), range(0, 10), and range(0, 10, 1)?

range(10) means this function has range from 0 to 9 with difference of 1

range(0,10) means this function has range from 0 to 9 with difference of 1. This is another way to using range(10). Here we have mention intial point which states that it can be changed as per requirement

range(0,10,1) this function has range from 0 to 9 with difference of 1. . This is another way to using range(10). Here we have mention intial point and difference between the numbers which states that it can be changed as per requirement

12. Write a short program that prints the numbers 1 to 10 using a for loop. Then write an equivalent program that prints the numbers 1 to 10 using a while loop.

for I in range(1,11,1):

print(i)

j = 1

while(j<11) :

print(j)

j = j+1

13. If you had a function named bacon() inside a module named spam, how would you call it after importing spam?

From bacom import bacon