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 ).

|  |  |  |
| --- | --- | --- |
| And operator | True | False |
| True | True | False |
| False | False | False |

|  |  |  |
| --- | --- | --- |
| or operator | True | False |
| True | True | True |
| False | True | False |

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?

Equal to ==

Greater than >

Less than <

Greater than equal to >=

Less than equal to <=

Not equal to !=

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

Equal to is a comparison operator, ==

Assignment operator is used to assign the values to variables, =

For example,

a=5 (assignment)

b=9 (assignment)

(a==b) False

7. Identify the three blocks in this code:

spam = 0

if spam == 10:

print('eggs')

if spam > 5:

print('bacon')

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.

spam = int(input('enter spam value 1, 2, or anything'))

if spam == 1:

print('Hello')

elif spam == 2:

print('Howdy')

else:

print('Greetings!')

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

Ctrl + c

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

Break completely terminates the loop whereas continue skips the current iteration and continue from next one.

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

They all are same.

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):

print(i)

-----------------------------------------

i = 1

while (i < 11):

print(i)

i+=1

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

From spam import bacon