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

Ans: True and False. They are used to evaluate conditions

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

Ans: 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 ).

Ans:

1. and

|  |  |  |
| --- | --- | --- |
| Value1 | Value2 | result |
| 0 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |

1. or

|  |  |  |
| --- | --- | --- |
| Value1 | Value2 | result |
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 1 |

1. not

|  |  |
| --- | --- |
| Value1 | result |
| 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?

Ans: ‘<’, ‘>’, ‘==’, ‘<=’, ‘>=’, ‘!=’

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

Ans: Equal to is a comparison operator which is used to compare if two values matches. Assignment operator is used to assign a value to a variable. For eg: In below code:

A = 5 # assignment operator

B = 4 #assignment operator

if A==B : #Equal to operator

print("Values are equal")

else:

print("Values are not equal")

7. Identify the three blocks in this code:

spam = 0 : Block 1

if spam == 10: :Block2 start

print('eggs') : Block2 ends

if spam > 5: : Block 3 starts

print('bacon')

else:

print('ham')

print('spam')

print('spam') : Block 3 ends

But there is no indentation so code will fail

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 = input(print("Enter value of spam."))

if int(spam) == 1:

print("Hello")

elif int(spam) == 2:

print("Howdy")

else:

print("Greetings")

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

Ans: Cntl + C

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

Ans: Break causes to move out of a conditional statement completely (like loop or evaluate) while continue skip one iteration in a loop

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

Ans: They all are same. Loop starts from zero ends at 9 causing loop to run 10 times

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.

Ans:

for i in range(10):

print(i+1)

i = 0

while i < 10:

print(i+1)

i +=1

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

Ans: spam.bacon()