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

Ans) True, False

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) AND

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

OR

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

NOT

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

4. What are the values of the following expressions?

(5 > 4) and (3 == 5)

not (5 > 4)

(5 > 4) or (3 == 5)

not ((5 > 4) or (3 == 5))

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

(not False) or (not True)

Ans) False, False, True, False, False, 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) == is comparison equal to operator

= is assignment operator

For comparing two variables or expressions we use equal to operator (1==1)

To assign a value to a variable we use assignment operator(a=1)

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')

Ans) different blocks in the code: if spam==10, if spam>5, 2 else

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’)

elif spam==2:

print(‘Howdy’)

else:

print(‘Greetings’)

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

Ans) ctrl+c

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

Ans) break will end the loop completely, continue will skip the code below continue and returns to loop.

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

Ans) range(10) -> prints 0 to 9 (default starts at 0 and stops at 10)

range(0,10) -> prints 0 to 9 (starts at 0 and stops at 10)

range(0,10,1) - > prints 0 to 9 (starts at 0 and stops at 10 and step 1)

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=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()