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

Ans- True and False

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

Ans- and, or , not

3. Make a list of each Boolean operator&#39;s truth tables (i.e. every possible combination of Boolean

values for the operator and what it evaluate ).

Ans-

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Input 1 | Input 2 | And Operator | Or Operator | Not Operator1 |
| 1 | 1 | 1 | 1 | 0 |
| 1 | 0 | 0 | 1 | 0 |
| 0 | 1 | 0 | 1 | 1 |
| 0 | 0 | 0 | 0 | 1 |

4. What are the values of the following expressions?

Ans (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- less than ( < ), less than or equal to ( <= ), greater than ( > ), greater than or equal to ( >= ), equal to ( == ), and 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.

Ans- Difference is equal operator is denoted by “==” and the assignment operator is denoted by “=” .

Eg- Assigning a value to variable x is show below

X = 50

7. Identify the three blocks in this code:

Ans Block 1

spam = 0

if spam == 10:

print(&#39;eggs&#39)

Block 2

if spam &gt; 5:

print(&#39;bacon&#39)

Block 3

else:

print(&#39;ham&#39;)

print(&#39;spam&#39;)

print(&#39;spam&#39;)

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.

Ans- spam = int(input("Enter a number"))

if spam == 1:

print("Hello")

elif spam == 2:

print("Howdy")

else:

print("Greeting")

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- The main difference between both the statements is that when break keyword comes, it terminates the execution of the current loop and passes the control over the next loop or main body, whereas when continue keyword is encountered, it skips the current iteration and executes the very next iteration in the loop.

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

Ans- Range(10) will take values from 0 upto 9

Range(0,10) here there is starting limit which and 0 and endling limit which is 10. So, the range will run from 0 to 9

Range(0,10,1) has both start and end limit and aslo has a jump which is 1 for this case.

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- Using for loop

for x in range(0,10):

print(x+1)

Using while loop

x= 0

while x<10:

print(x+1)

x +=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()