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

* True and False
* 0 and 1

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).

|  |  |  |  |
| --- | --- | --- | --- |
| TRUE | And | TRUE | TRUE |
| TRUE | And | FALSE | FALSE |
| FALSE | And | TRUE | FALSE |
| FALSE | And | FALSE | FALSE |
| TRUE | Or | TRUE | TRUE |
| TRUE | Or | FALSE | TRUE |
| FALSE | Or | TRUE | TRUE |
| FALSE | Or | FALSE | FALSE |
| Not TRUE is | | | FALSE |
| Not FALSE is | | | TRUE |

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.

* == is use compare two values where the comparison is True or not
* = is use to assign value for variable to store

7. Identify the three blocks in this code:

* Spam=0 🡪 Use spam=int(input()) this will allow you to give input
* If spam==10:
  + Print(“eggs”)
* If spam>5: 🡪 Use elif instead of if
  + Print(“bacon”)
* else: 🡪 In else statement print “ham” and “spam” remove second “spam”
  + Print(“ham”) 🡪 keep it
  + Print(“spam”) 🡪 keep it
  + Print(“spam”) 🡪 Remove it

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())
* 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?

* Press CTRL + C

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

* Break: - The “break” stop the continuation of the loop.
* Continue: - The “continue” does not stop the continuation of loop and it stops the current.

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

* Output will remain same in all three cases
* Range(Start, End, Jump)
* Range(10) 🡪 Range(0,10,1)
* Range(0,10) 🡪 Range(0,10,1)
* Range(0,10,1) 🡪 Range(0,10,1)

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

* FOR LOOP
  + n=range(1,11)
  + for i in n:
    - print(i)
* WHILE LOOP
  + i=1
  + while i<11:
    - print(i)
    - i += 1
* PRINT FUNCTION
  + n=int(input())
  + print(\*range(1,n+1))

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

* Import spam
* spam.bacon()