PYTHON BASIC ASSIGNMENT 2

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

A. The two values of the Boolean data types are True and False.

You can write them as: A = True

B = False

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

A. The three different types of Boolean operators are AND, OR and NOT.

3. Make a list of each Boolean operator truth tables (i.e. every possible combination of Boolean

values for the operator and what it evaluate ).

A. Truth table for AND operator

|  |  |  |
| --- | --- | --- |
| A | B | O |
| F | F | F |
| F | T | F |
| T | F | F |
| T | T | T |

Truth table for OR operator

|  |  |  |
| --- | --- | --- |
| A | B | O |
| F | F | F |
| F | T | T |
| T | F | T |
| T | T | T |

Truth table for NOT operator

|  |  |
| --- | --- |
| A | O |
| F | T |
| T | F |

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?

A. The six comparison operators are;

Greater than

Less than

Greater than or equal to

Less than or equal to

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.

A. Assignment Operator (=) it is used to assign the value of variable or expression.

Condition:

x=(a+b);

y=x;

Here, When first expression evaluates value of (a+b)will be assigned into x and in second expression y=x value of variable x will be assigned into y.

Equal to Operator (==) is a relation operator used for comparison (to compare value of both left and right side operands).

Condition:

int x,y;

x=10;

y=10;

if(x==y)

print("True");

else

print("False");

When expression x==y evaluates, it will return 1 (it means condition is TRUE) and "TRUE" will print.

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”)

A.

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.

A.

spam = int(input("value of spam"))

if spam == 1:

print("Hello")

elif spam == 2:

print("Howdy")

else:

print("Greetings!")

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

A. CTRL+C

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

A. 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)?

A. In these above ranges there will be no difference after performing the operation for for loop.

for I in range(10) for I in range(0,10) for I in range(0,10,1)

print(i) Print(i) print(i)

0 0 0

1 1 1

2 2 2

3 3 3

4 4 4

5 5 5

6 6 6

7 7 7

8 8 8

9 9 9

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.

A. FOR loop

for a in range(0,10):

print(a)

WHILE loop

a = 0

b = 10

while a<10:

print(a)

a=a+1

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

importing spam?

A. It can be called as spam.bacon()