**Answers for Assignment - 2**

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

**Ans:-** The two Boolean values are true and false. In Python, the class that represents Boolean values ​​is bool. You are using the keyword **True** for returning the value **1** and **False** for returning the value **0**

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

**Ans:-** There are three types of Boolean operators:

(i) AND (‘and’ or &&) operator

(ii) OR (‘or’ or ||”) operator

(iii) NOT operator (!)

**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).**

**AND Operator**

|  |  |  |
| --- | --- | --- |
| T | T | T |
| T | F | F |
| F | T | F |
| F | F | F |

**OR Operator**

|  |  |  |
| --- | --- | --- |
| T | T | T |
| T | F | T |
| F | T | T |
| F | F | F |

**NOT Operator**

|  |  |
| --- | --- |
| *not(True)* | *False* |
| *not(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:-** (i) F (ii) F (iii) T (iv) F (v) F (vi) T

**5. What are the six comparison operators?**

**Answer:** (i) == (ii) >= (iii) <= (iv) != (v) && (vi) ||

**6. How do you tell the difference between the equal to and assignment operators?**

**Describe a condition and when you would use one.**

**Ans:-** An assignment operator  “**=**” is used to assign the value to a variable. The conditional operator ‘==’ is used to checks the equality on both side expressions and it returns true if the statement is true otherwise it returns false.

**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:-**  **Block 1:**

if spam == 10:

print('eggs')

**Block 2:**

if spam > 5:

print('bacon')

**Block 3:**

else:

print('ham')

**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 either 1 or 2 or any integer”))

if spam == 1:

print('Hello')

if 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** terminates the execution of the loop and **continue** eliminates only the current loop.

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

**Ans:-** There is no difference in output while using range(10), range(0, 10), and range(0, 10, 1) in for loop.

**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 i in range(1,11):

print(i)

Using While loop:

i=1

while(i<=10):

print(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()