**Assignment – 2**

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

Ans - There are two Boolean values are :-

1. True
2. False

It is used to represent the truth value of expression.

When the values is returned , True = 1 and False = 0

Ques – 2 What are the three different types of Boolean operators ?

Ans - The three Boolean operators are :-

1. OR
2. AND
3. NOT

**Ques - 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 ).

|  |  |  |
| --- | --- | --- |
| OR | | |
| I/P-A | I/N-B | O/P |
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 1 |

|  |  |
| --- | --- |
| NOT | |
| INPUT | OUTPUT |
| 0 | 1 |
| 1 | 0 |

|  |  |  |
| --- | --- | --- |
| AND | | |
| I/P-A | I/P-B | O/P |
| 0 | 0 | 0 |
| 1 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 1 | 1 |

Ans –

**Ques – 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**

S(not False) or (not True) = **Ture**

Ques -5 What are the six comparison operators ?

|  |  |
| --- | --- |
| Operators | Meaning |
| < | Less than |
| > | Greater than |
| <= | Less then or equal to |
| >= | Greater then or equal to |
| == | Equal to |
| != | Not Equal to |

**Ans -**

**Ques 6 -**  How do you tell the difference between the equal to and assignment operators?Describe a condition and when you would use one.

**Ans -**

|  |  |
| --- | --- |
| **Assignment operators** | **Equal to** |
| 1. **“=” is the assignment operator. It is changes the variable on the left to the value on the right. The result is equal to the assignment value.** | 1. **“==” is the equality operator. It evaluates whether the 2 value on the left and the right are equal, the result can be either True or false.** |

**Example :- a = 100**

**B = 200**

**Print (a==b) ## Equality operator**

**>>> False**

**Example :- a = 100**

**B = 100**

**Print(a==b) ## Equality operator**

**>>> True**

**Ques – 7 Identify the three blocks in this code?**

**Ans - spam = 0**

**if spam == 10:**

**print('eggs') # indent increased, block A**

**if spam > 5: # still block A**

**print('bacon') # still block A, indent increased, block B inside block A**

**else: # still block A, indent decreased, block B ended in line above**

**print('ham') # still block A, indent increased, block C inside block A**

**print('spam') # still block A, indent decreased, block C ended in line above**

**print('spam') # indent decreased, block A ended in line above**

**Ques -**  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 ==int("1"):

print("Hello")

elif spam == int("2"):

print("Howdy")

else:

print('Greatings')

Ques – 9 If ypur programme is stuck in endless loop, what key you will press?

Ans - Clrt + C or Stop kernal.

Ques – 10 How do you tell the difference between break and continue?

Ans - The break keywords come, it terminates the execution of the current loop and passes the control over the next loop or main body. And the continue skip the current iteration and executes the very next iteration in the loop.

Ques – 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. The range(10) = It means call range from 0 but not including 10

Range(0,10) it means the loop starts from 0.

Range(0,10,1) it means increase the variable by 1 on each iteration .

**Ques - 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 – Program using the for loop.

for i in range (1,11):

Print(i)  
 Program using the while loop

I=1

While i<=10:

Print(I)

I = i+1

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

Ans - The function can be called with spam.bacon().