Assignment no.2 (Kunal Chauhan)

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

Answer : A variable of the primitive data type boolean can have two values: true and false. When the value is returned, true = 1 and false = 0 .

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

Answer : The three basic boolean operators are: AND, OR, and 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 ).

Answer : True is 1 & False is 0

Truth table for AND :

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | 1 | 0 | 1 | 0 |
| B | 0 | 1 | 1 | 0 |
| OUTPUT | 0 | 0 | 1 | 0 |

Truth table for OR :

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | 1 | 0 | 1 | 1 |
| B | 0 | 1 | 1 | 0 |
| OUTPUT | 0 | 1 | 1 | 1 |

Truth table for not :

|  |  |  |
| --- | --- | --- |
| A | 1 | 0 |
| OUTPUT | 0 | 1 |

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?

Answer :

Operator What it means

== Equal to

!= Not equal to

< Less than

> Greater than

<= Less than or equal to

>= Greater than or 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.

Answer : First of all = is a assignment operator and == is a comparison operator. = operator is used to assign value to a variable and == operator is used to compare two variable or constants.



7. Identify the three blocks in this code:

spam = 0

if spam == 10:

print(‘eggs’) Block 1 : Indentation error

if spam > 5:

print(‘bacon’) Block 2 : Indentation error

else:

print(‘ham’) Block 3 : Indentation error

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.

Answer :

spam = int(input("Enter a number: "))

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?

Answer : We can stop an infinite loop with CTRL + C .

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

Answer : 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)?

Answer : All three will give the same result i.e, 0,1,2,3,4,5,6,7,8,9

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.

Answer : For loop - for i in range(1,11):

print(i)

For while loop - a =1

while a <= 10:

print(a)

a+=1

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

Answer : spam.bacon()