**Assignment 2**

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

The two values of Boolean data types is true() and false(). Here value 0 represents false and 1 represents true

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

The 3 different types of Boolean operators are ‘and’, ‘or’ and ‘not’

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

**values for the operator and what it evaluate ).**

|  |  |  |
| --- | --- | --- |
| **a** | **b** | **a and b** |
| false | false | false |
| false | true | false |
| true | false | false |
| true | true | true |
| **a** | **b** | **a or b** |
| false | false | false |
| false | true | true |
| true | false | true |
| true | true | true |
| **a** | **not a** |  |
| true | false |  |
| false | 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?**

The six comparison operator are

== *Equal to*

!= b *Not equal to*

> *Greater than*

< *Less than*

>= *Greater than or equal to*

<= *Less 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.**

== equal to is a comparison operator that is used to compare 2 variables

Eg, a==b will result true if its is equal or else will result false if it is not true

= is an assignment operator used to assign a particular value to a variable

Eg, a=3 will assign the number 3 to a

**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’)**

In line 3 there is a intended block of if statement in line 2, if statement in line 4 and in line 7

**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.**

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?**

Ctrl+C will help to get out of endless loop

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

Break: A break statement in Python alters the flow of a loop by terminating it once a specified condition is met.

Continue: The continue statement in Python is used to skip the remaining code inside a loop for the current iteration only

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

range(10)- will return a sequence of number from 0 to 10 without including 10

range(0,10)- will return sequence starting from 0 and ends at 9 without including 10

range(0,10,1)- will return the sequence starting from 0 and goes till 10 without including 10 with a iteration of 1

**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 i in range(11):

print(i)

b. count = 1

while count <=10

print (count)

count +=1

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

**importing spam?**

spam.bacon()