**Python Tasks – Day8**

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

**True, False (1, 0)**

1. **What are the three Boolean operators?**

* **Logical and, or, not**

1. **Write out the truth tables of each Boolean operator (that is, every possible combination of Boolean values for the operator and what they evaluate to).**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Input A | Input B | Logical and | Logical or | Logical not(~A) |
| T | **T** | **T** | **T** | **F** |
| T | **F** | **F** | **T** | **F** |
| F | **T** | **F** | **T** | **T** |
| F | **F** | **F** | **F** | **T** |

1. **What do the following expressions evaluate to?**
   1. **(5 > 4) and (3 == 5)**

**False**

* 1. **not (5 > 4)**

**False**

* 1. **(5 > 4) or (3 == 5)**

**True**

* 1. **not ((5 > 4) or (3 == 5))**

**False**

* 1. **(True and True) and (True == False)**

**False**

* 1. **(not False) or (not True)**

**True**

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

**>, <, <=, >=, ==, !=**

1. **What is the difference between the equal to operator and the assignment operator?**

* **The equal to operator checks whether two operands or values are equal or not, it is a comparison operator that’s why it returns True or False.**
* **The assignment operator is used to assign value on the right to the variable on the left.**

1. **Explain what a condition is and where you would use one.**

* **‘is’ is identity operator it is used to check if two values are located at the same part of memory or refers to the same object**