

## Experiment 2

**Aim:** To implement Comparison Operators using Python.

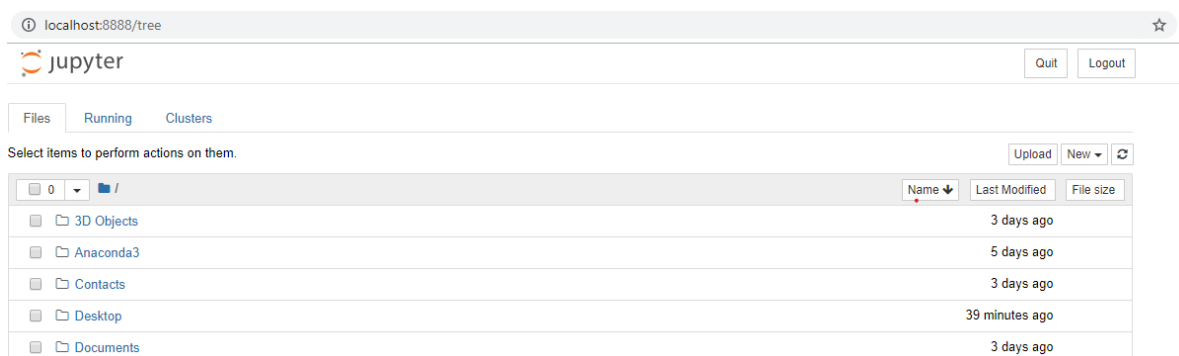
### Theory: Comparison Operators:

Assume two variables a and b.

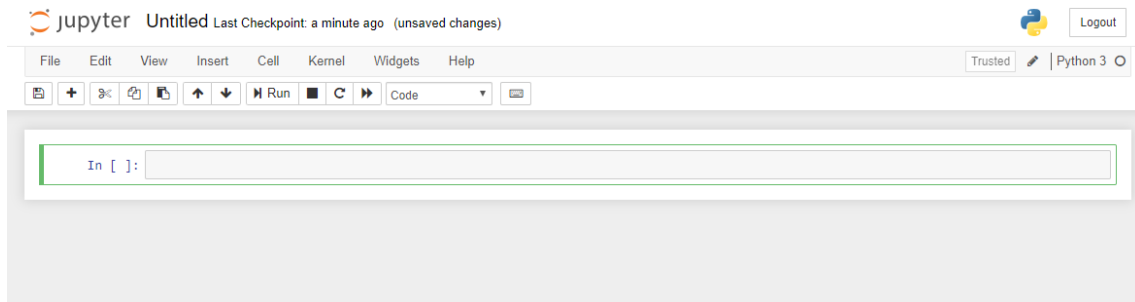
Comparison Operator	Symbol	Description	Example
Equal	==	If the operands are equal, it gives “True” as output.	a==b
Not equal	!=	If the operands are not equal, it gives “True” as output.	a!=b
Greater than	>	If the first operand is greater than second operand, it gives “True” as output.	a>b
Less than	<	If the first operand is less than second operand, it gives “True” as output.	a<b
Greater than or equal to	>=	If the first operand is greater than or equal to the second operand, it gives “True” as output.	a>=b
Less than or equal to	<=	If the first operand is less than or equal to the second operand, it gives “True” as output.	a<=b

### Steps:

1. Open Jupyter Notebook.



2. Open a New File by clicking New → Python3; a new python3 file opens, where we will be writing the codes.



3. Example Code: `#a equals to b` *# indicates this is a comment*  
`a==b` *using == operator to compare a and b*
4. To obtain the result, press “**Ctrl+Enter**”.

**Code:** In: `#equals to`

`45==54`

Out: False

In: `#not equals to`

`54!=46`

Out: True

In: `#greater than`

`45>32`

Out: True

In: `#less than`

`56<43`

Out: False

**Observation:** The return type is a Boolean value (i.e. True or False).

### Practice Questions:

1. Write and implement a code to compare the values “10” and “5” using “greater than or equal to” operator.
2. Implement a code using the comparison operator “equal to” to compare two values “62” and “26”. Write the observations.
3. Write and implement a code to compare the values “20” and “20” using less than or equal to operator. Write the observations.