

Module 2 Lab 3 Solution

Welcome to our Lab Practice!

This lab is about logical and relational operations. Are you ready? Let's get started!

You will find some small tasks in sections below.

Relational Operation

In this section, you are going to code and run relational operations of two numbers.

Hint: to print out the comparison, we can use the `print()` to print multiple values out.

For example, `print(x, 'operator', y, 'is', x operator y)` for an operator.

###Task: Get some comparisons.

1. Assign x with 2, y with 3.
2. print out the comparison and result of
3. `x > y`
4. `x >= y`
5. `x == y`
6. `x <= y`
7. `x < y`
8. `x != y`

```
x = 2
y = 3
print(x, '>', y, 'is', x > y)
print(x, '>=', y, 'is', x >= y)
print(x, '==', y, 'is', x == y)
print(x, '<=', y, 'is', x <= y)
print(x, '<', y, 'is', x < y)
print(x, '!=', y, 'is', x != y)
```

###Task: More comparisons

1. Ask the user to enter an integer, convert and assign it to x;
2. Ask the user to enter another integer, convert and assign it to y;
3. print out the comparison and result of
4. $x > y$
5. $x \geq y$
6. $x == y$
7. $x \leq y$
8. $x < y$
9. $x \neq y$

```
x = int(input('Please enter an integer'))
y = int(input('Please enter an integer'))
print(x, '>', y, 'is', x > y)
print(x, '>=', y, 'is', x >= y)
print(x, '==', y, 'is', x == y)
print(x, '<=', y, 'is', x <= y)
print(x, '<', y, 'is', x < y)
print(x, '!=', y, 'is', x != y)
```

Logical Operation

In this section, you are going to code and run logical operations of two numbers.

Hint: to print out the equation, we can use the print() to print multiple values out.

For example, `print(x, 'operator', y, 'is', x operator y)` for an operator.

###Task: Get some computation.

1. Assign x with True, y with False.
2. print out the computation and result of
3. x and x
4. x and y
5. y and x
6. y and y
7. x or x
8. x or y

- 9. y or x
- 10. y or y
- 11. not x
- 12. not y

```
x = True
y = False
print(x, 'and', x, 'is', x and x)
print(x, 'and', y, 'is', x and y)
print(y, 'and', x, 'is', y and x)
print(y, 'and', y, 'is', y and y)
print(x, 'or', x, 'is', x or x)
print(x, 'or', y, 'is', x or y)
print(y, 'or', x, 'is', y or x)
print(y, 'or', y, 'is', y or y)
print('not', x, 'is', not x)
print('not', y, 'is', not y)
```