# Operators

## Lesson 2 – Expert Coding in Minecraft with Python

1. What is the Internet?
2. What is a packet and what do they contain?
3. How do packets travel through the internet?
4. The protocols used in the Internet are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which allows users to easily connect additional computing devices to the Internet.
5. What is the IP Address?
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_are special devices that help direct data packets across the internet.
7. Name 5 common operations in Python.
8. Match the arithmetic operator with it’s symbol.

|  |  |
| --- | --- |
| Addition | - |
| Subtraction | % |
| Multiplication | + |
| Division | \* |
| Modulus | / |

1. Write the comparison operator name next to the symbol.

== \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

!= \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

=== \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

!== \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

> \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

< \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

>= \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

<= \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. The goal of comparison operators is to return a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ value of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, to make decisions.
2. What are assignment operators used for?
3. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ assignment operator adds the value on the right side to the existing value of the variable and assigns the results back to the variable.
4. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ assignment operator subtracts the value on the right side from the existing value of the variable and assigns results back to the variable.

**In Game Assessment References:**

Final Assessment – Game

You will be given a code to import into MakeCode. This code is for a mini-game. They will be given this information about the game:

This game requires the player to place certain blocks types and amounts in the appropriate areas. The code should check for the following.

Emerald Blocks equal to 4.

Iron Blocks less than 4.

Diamond Blocks greater than or equal to 4.

Copper blocks less than or equal to 4.

Import the code into MakeCode. Then update the operators AND the variables in the code match the information above and then play the game. Don’t forget to upload your code to the portal when you are done.