Programming in Python: Takeaways

Syntax

- Displaying the output of a computer program:

```
print(1 + 2)

print(5 * 10)
```

- Ignoring certain lines of code by using code comments:

```
# print(1 + 2)

print(5 * 10)

# This program will only print 50
```

- Performing arithmetical operations:

```
1 + 2

4 - 5

30 * 1

20 / 3

4**3

(4 * 18)**2 / 10
```

Concepts

- When we give a computer a set of instructions, we say that we're **programming** it. To program a computer, we need to write the instructions in a special language, which we call a **programming language**.
- Python has **syntax** rules, and each line of instruction has to comply with these rules. For example, `print(23 + 7) print(10 - 6) print(12 + 38)` doesn't comply with Python's syntax rules and raises a **syntax error**.
- The instructions we send to the computer are collectively known as **code**. Each line of instruction is known as a **line of code**.

- When we write code, we *program* the computer to do something. For this reason, we also call the code we write a **computer program**, or a **program**.
- The code we write serves as **input** to the computer. The result of executing the code is called **output**.
- The sequence of characters that follows the `#` symbol is called a **code comment**. We can use code comments to stop the computer executing a line of code or add information about the code we write.