Intro to Programming with Python

Software

Software is a set of instructions to the hardware.

Programming

Programming means writing the instructions to create a software.

Code

The instructions that we write to create software is called Code.

Syntax

Similar to Grammar rules in English, Hindi, each programming language has a unique set of rules. These rules are called the Syntax of a Programming Language.

Why Python

Python is an easy to learn, powerful programming language. With Python, it is possible to create programs with minimal amount of code. Look at the code in Java and Python used for printing the message "Hello World"

Java:

```
class Main {

    public static void main(String[] args) {

        System.out.println("Hello World");

    }

}
```

Python code

```
print("Hello World")
```

Applications of Python

Python is a versatile language which has applications in almost every field

Artificial intelligence (AI)

Machine Learning (ML)

Big Data

Smart Devices/Internet of Things (IoT)

Cyber Security

Game Development

Backend Development, etc.

Career Opportunities

Python developers have plenty of opportunities across the world

DevOps Engineer

Software Developer

Data Analyst

Data Scientist

Machine Learning (ML) Engineer

AI Scientist, etc.

Hello World Program in Python

Here is a simple Python code that you can use to display the message "Hello World"

Code

```
print("Hello World!")
```

Output

Hello Worl