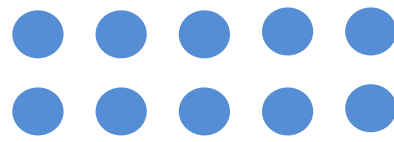# Introduction to Python

Course Structure

Understand fundamental programming concepts

Write your own Python scripts
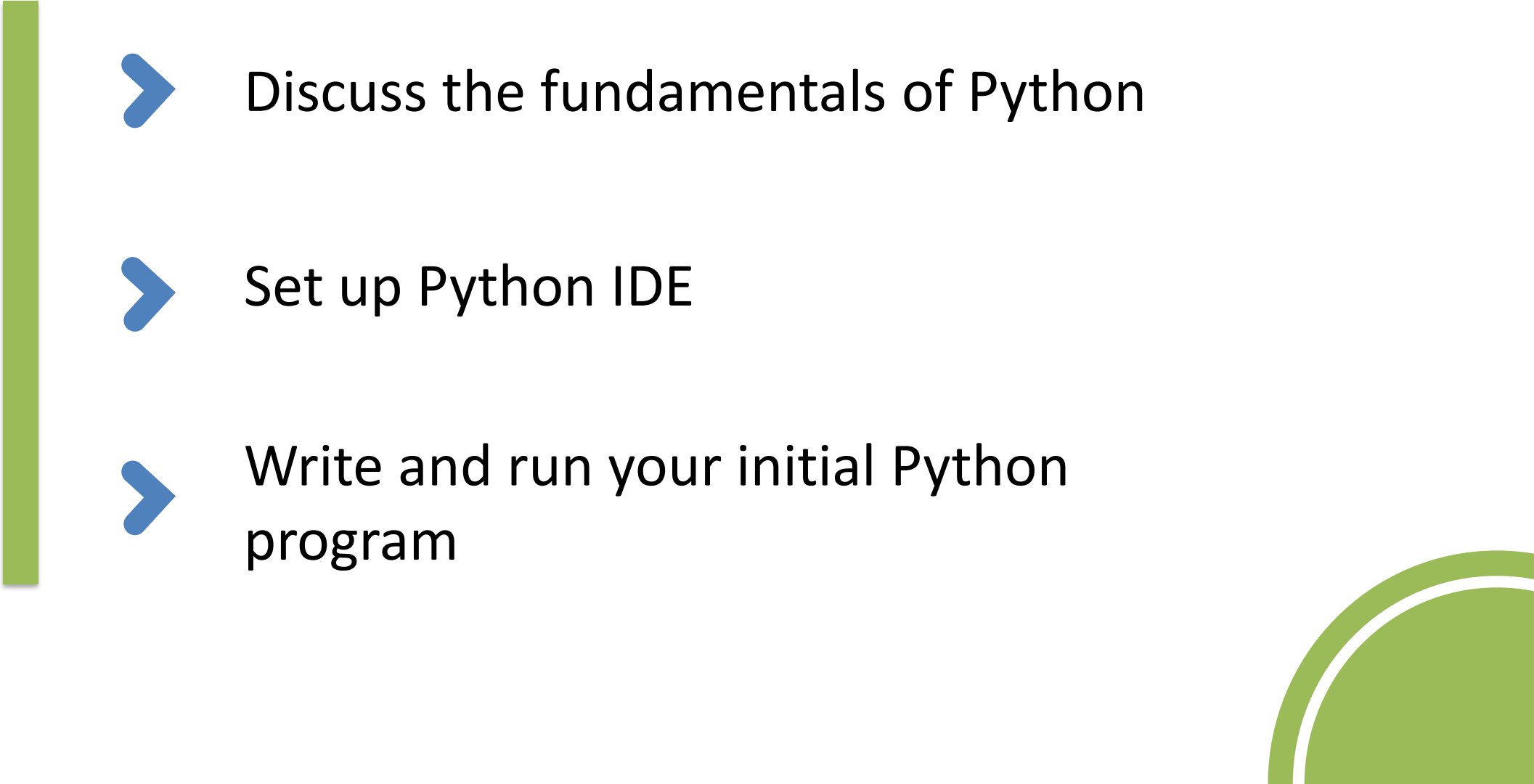
Basic syntax and data types

Control structures

Functions and modules

LESSON OBJECTIVES

Discuss the fundamentals of Python

Set up Python IDE

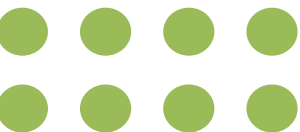Write and run your initial Python program

What is Python?

- Python was designed by Guido van Rossum.

- Python's popularity grew significantly, especially in fields like data science, machine learning, and web development.

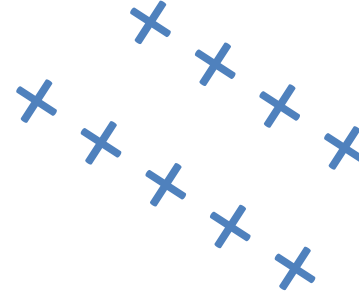- High-level, interpreted programming language known for its simplicity and versatility.

Key features

- Easy to learn and use

- Extensive standard library

- Large and active community

- Cross-platform compatibility

- Interpreted, allowing for rapid development and testing

Popular applications

- Web development

- Data analysis and visualization

- Artificial intelligence and machine learning

- Data science

- Automation and scripting
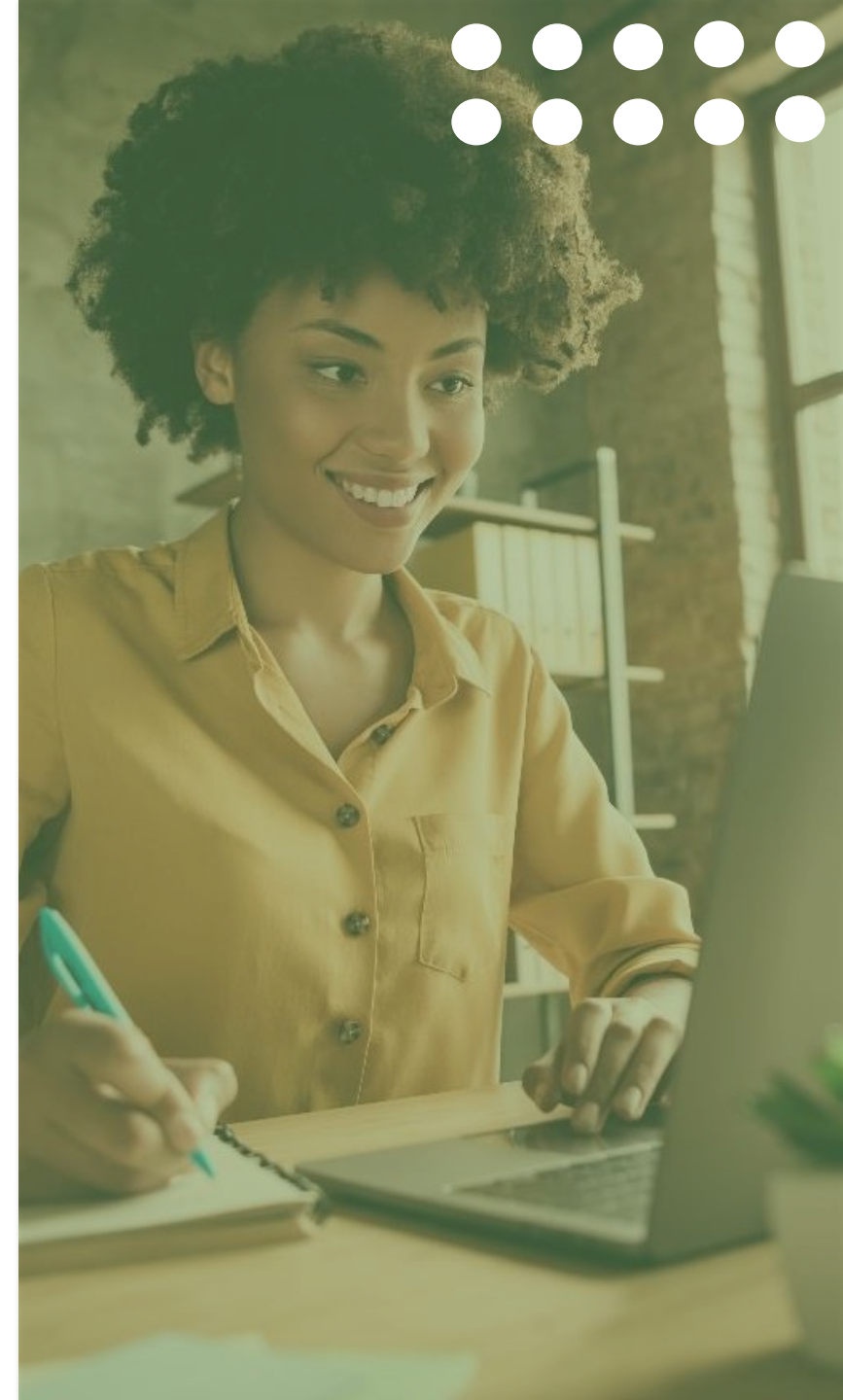
- Internet of Things (IoT)

Why learn Python?

Excellent language for beginners
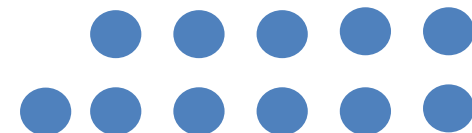
Used in various fields

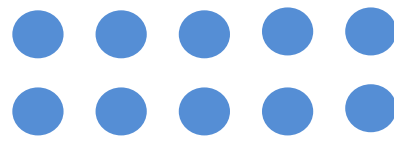Vast community means ample resources

Python runs on various operating systems

Code example

```
carlist = ["Toyota", "Jaguar", "Tesla"]
for car in carlist:
    print(car)
```

Getting started with Python