

Python, step by step

From your first instruction to working with data



What will I be able to do?

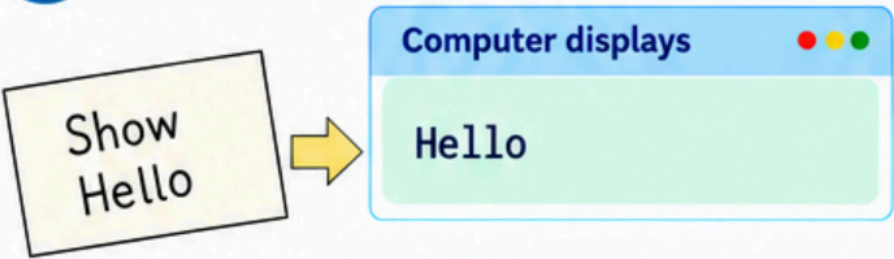
Python is a programming **language**: a way to write instructions a computer can carry out.

Write instructions, check their results, and use them to work with data.



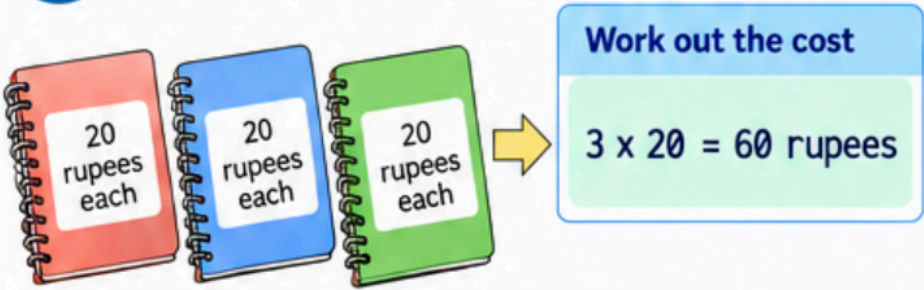
MAYA

1 Give instructions



Write an instruction and run it. Run means carry it out.

2 Calculate and remember



Give values names so we can use them again.

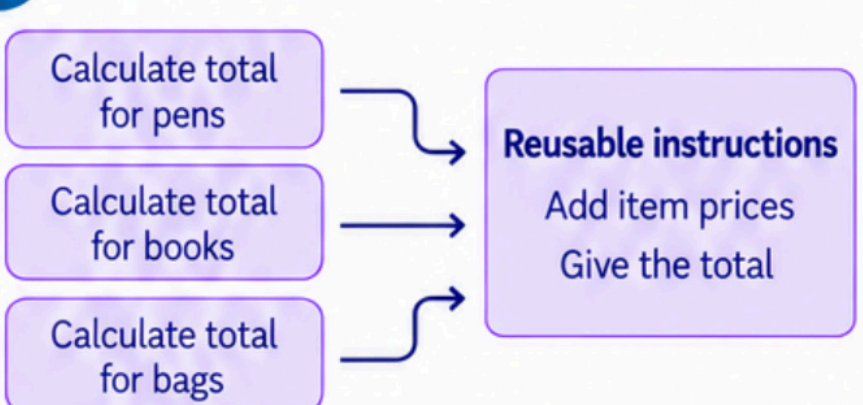
3 notebooks = 60 rupees

3 Choose and repeat



Choose an action. Repeat a step for several items.

4 Reuse a set of steps



A **function** is a named group of instructions we can call again.

5 Read and check data

Item	Price (rupees)
Pen	10
Book	?
Bag	50

Missing price!

Data means recorded values. Read tables and find missing or incorrect values.

6 Prepare for ML and GenAI

Item	Price
Pen	10
Book	?
Bag	50

Check the shop's price list: Book = 30 rupees

Item	Price
Pen	10
Book	30
Bag	50

Next course

ML and GenAI

Machine learning (ML) learns patterns from examples. Generative AI (GenAI) produces content such as text. We will first learn the Python needed to prepare their data.

Start here: The first five pages



Map



Run Python



Display a result



Calculate



Name values



Must I know programming already?



No. We will explain each new word and symbol before using it.