

CODING AND AI

How many coding languages are there?
Can code take you to the Moon? Find out more
about coding and artificial intelligence.

Do You Know? is a series of levelled non-fiction books featuring video content, project work and critical-thinking activities to motivate and engage young learners. Covering a range of STEM topics from nocturnal animals to climate change, *Do You Know?* takes an enquiry-based approach, developing children's language, communication and investigation skills.

Level 1 Pre-A1 • 400 headwords

Level 2 A1 • 600 headwords

Level 3 A1+ • 800 headwords

Level 4 A2 • 1100 headwords

Lexile measure 590L • Word count 808

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DO YOU KNOW?

CODING AND AI

3

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DO YOU KNOW?



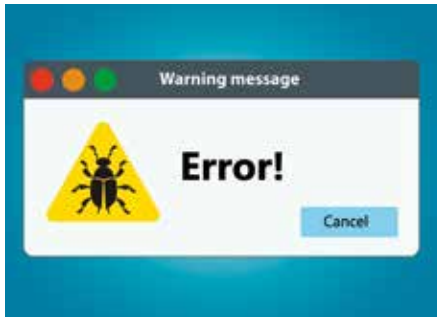
CODING AND AI

Level 3

Contents

New words	4
What is code?	6
Where does code come from?	8
What is binary?	10
How many programming languages are there?	12
Can code take you to the Moon?	14
What is an algorithm?	16
What is a computer program?	18
What is a computer bug?	20
What is AI?	22
Are computers cleverer than us?	24
Can computers feel happy or sad?	26
Can AI help us?	28
Quiz	30

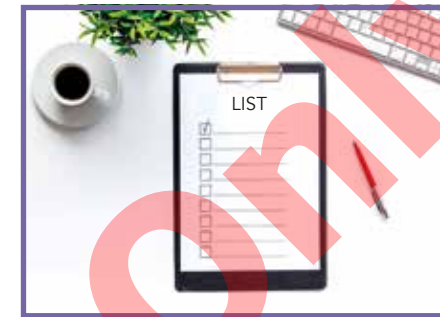
New words



bug



file



list



Mars



follow instructions



information



mathematician



programmer



light switch



programming

What is code?



Code is the language computers use. It has words and numbers. The code tells the computer what to do.

Mobile phones and laptops use code. They are computers!

Lots of people learn to write code in school.



Someone who writes code is called a **programmer**.



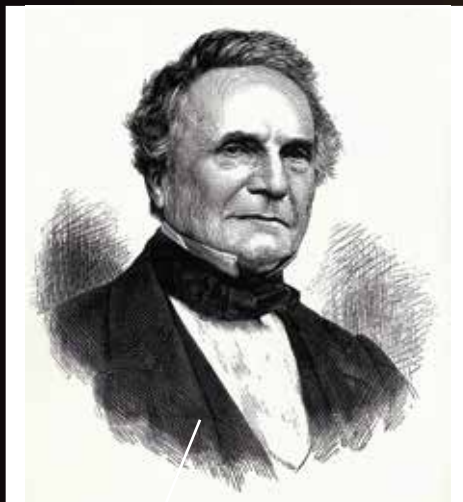
 **THINK!**

Code is a language. How many other languages can you name?

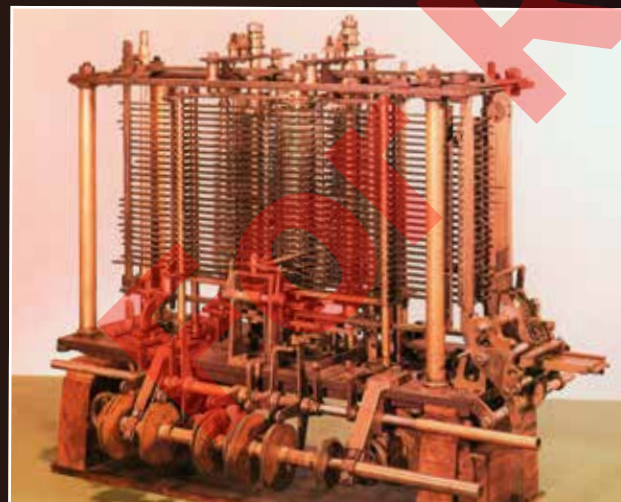
Where does code come from?

The first person to write computer code was Ada Lovelace, in the 1840s.

She worked with Charles Babbage, who had an idea to make a computer. Ada Lovelace wrote the code to make it work – but it was never built!



Charles Babbage



Today, lots of people want to be programmers.

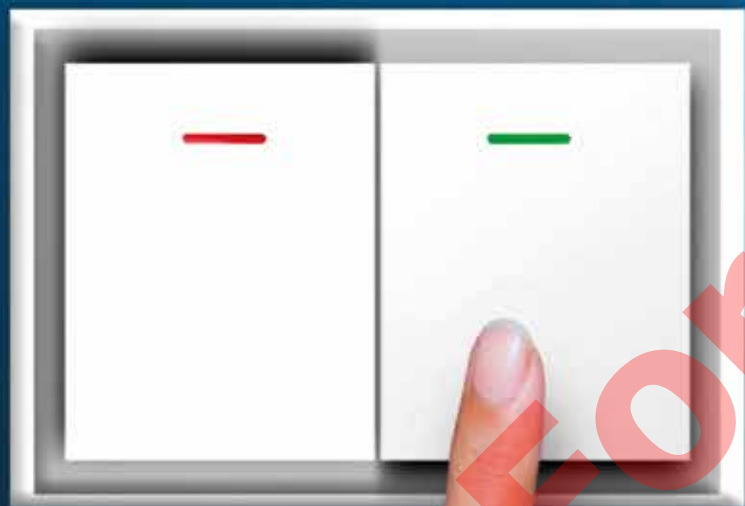
Ada Lovelace

 **FIND OUT!**

Use books or the internet to find out about Ada Lovelace. What did she want her first code to do?

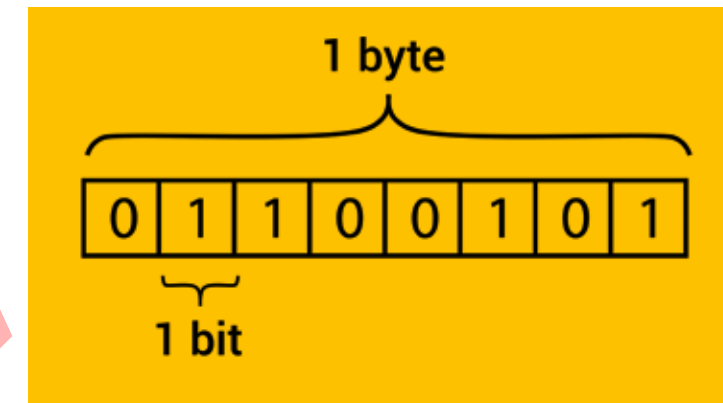
What is binary?

Computer code uses only two numbers, 0 and 1. This is called binary code. Computers use binary code.



Think of a **light switch**. It can be on or off.

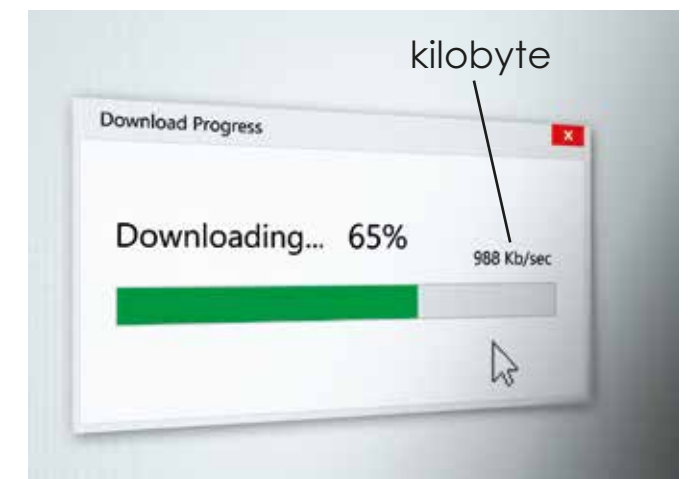
In binary, 1 is on and 0 is off.



One number in binary (1 or 0) is called a bit. Eight bits together make a byte.



One thousand bytes make a kilobyte. Lots of kilobytes make a **file** you can use!



FIND OUT!

Use books or the internet. How do you write numbers in binary? Can you write your age?