We Are Software Developers — Year 4

Objectives

We are learning to:
- Design, write and debug programs that accomplish specific goals.
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
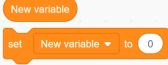
Previous learning

An instruction tells you to do something.

An algorithm is a precise list of instructions.

A program is an algorithm written in a way a computer understands.

A parameter is a number put into a block to tell the computer how far/often to do it.

Websites and Apps

https://scratch.mit.edu/parents/ This is the website for Scratch - the programming language we use in school.

Key Vocabulary

flow chart	Diagram which shows an algorithm.
variable New variable set New variable to 0	A changeable value recorded in Scratch's memory - it can be used to keep score, for example.
assign	To give a value to a variable.

if / then / else
 if then
 else
	A Scratch block which executes one part of the program if a condition is met, and another part of the program if it is not met.

E-Safety

Scratch

In this unit you will plan and design an educational game.

You will first plan your game and you might use a flow chart.
Next, you will program the game.
Finally, you will debug the program to make sure it works properly.

This program asks a question and, when an answer is given, it responds differently depending on whether it is correct or not.