



What is Programming?

The two main types of Programming Language is Visual and Textual.

Visual Programming



Textual Programming

```
5,
LocalWorkload = HIGH,
reproduction (
  mutationRate = '2.3',
  partnerSelectionPolicy = fitnessbased,
  crossoverPolicy = fitnessbased
)
```

What are Beebots and robots?

Beebot.



Robots are used for lots of things in our lives.

We use robots to help us with lots of jobs.

- They can do things such as clean the floor or mow the lawn.
- We use robots to help in factories.
- We use robots to help us learn.
- We tell / program them to job a task.

Robots.



Commands

Forwards



Turn left



Turn right



clear





backwards



pause

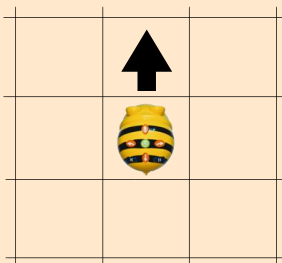
Key Vocabulary

Commands	An instruction that tells the robot to do an action.
Programming	Using one or more instructions to make a robot perform a certain action
Algorithm	a sequence of instructions a robot will follow to perform a certain action
Instructions	Commands that help an action to be finished.
Directions	Which way to look or move
Bug	An error in a computer program
Go 	To start following the program
route	How to get from one place to a different place
turn	Facing a different way without moving forwards or backwards
plan	To think about the best way to finish a task
clear 	Forget old commands ready to start new instructions.

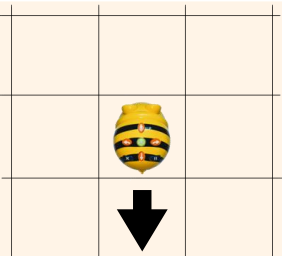
Moving and Turning

Moving commands make your robot move from one place to another.

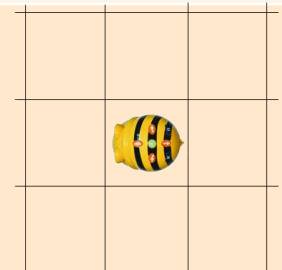
Forwards



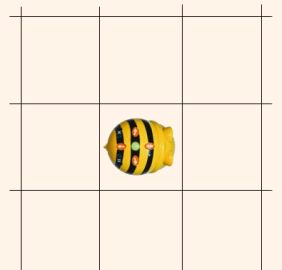
Backwards



Left turn



Right turn



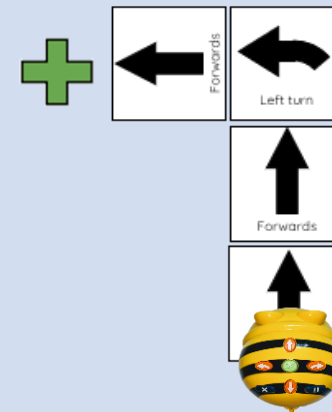
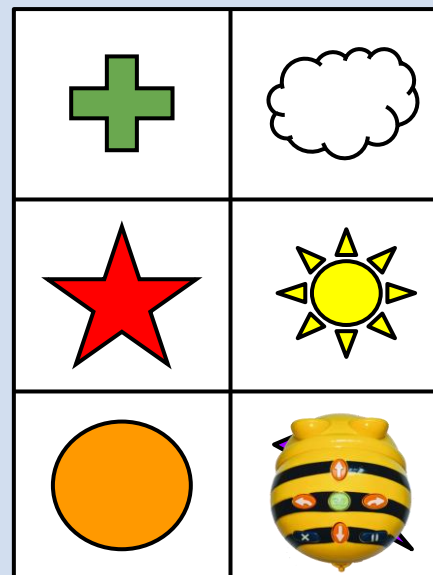
Planning a route.

If we want to move our robot to the cross,

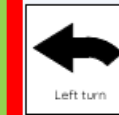


we need to plan a route.

There are lots of routes that would get there, but which way is the best?



What is a bug?



A bug is an error in the program or algorithm that makes the robot do something that you did not expect.

Apps and Programs I can use.

<https://www.purplemash.com/app/tools/2go>

Purple Mash



2Go

