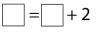# Level up: Variables

The following code is taken from the Roll-a-ball tutorial[1] provided with Unity.

Variables are a special type of programming feature which are essentially reserved spaces for data.

You have been using variables for a long time in Maths. When you see problems such as: y=x+2, you are using variables called x and y as placeholders for numbers. Even before you did this in maths, you were using maths such as this:

$$\boxed{} = \boxed{} + 2$$

Both of these methods are just different ways of talking about variables.

In C#, we declare variables like this:

```
public float speed;
```

This declares a variable of type float called speed. It is also a public variable, which means that it is accessible outside of the procedure.

To change the variable, it's basic maths … you use an assignment statement:

```
speed = speed + 1;
```

This assigns the variable the value on the right hand side of the assignment statement. In this case, it increments speed by 1.

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[1] https://unity3d.com/learn/tutorials/projects/roll-ball-tutorial/moving-camera?playlist=17141

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