

Sequence in an algorithm | Part B

So let's have a look at a more complicated program.

Here is one that I wrote earlier. Load it up. This is going to be a Number Magic Trick program. Now what it does is allows the user to enter a number, and that number is going to have some mathematical operations performed on it. Now the trick is that no matter what number the user enters, we always end up with an answer of 2. That's the magic bit. I'll just talk you through the program to start with. At the top I've used triple quotes to give the name of the program and the current version. Now that's quite important, because as we go on and we improve this program we might want to make some changes, and we want to know how many times we've changed it. So, the version number is quite important. On the next line I've declared two variables. These are going to be numbers, so we are going to use an integer to store the numbers, that is a whole number. You'll notice at the end of the line I've also added a comment, now I do that using a hash symbol. You will see that idle has changed the text after that to red, and that means that it won't actually be executed. It's useful for another human reading this program to know that I have added a comment here. It makes your code more readable when somebody needs to improve it, or change it. They can see the way that you were thinking, they know what that line actually does.

I've declared another variable. This one is called 'your number.' I have got a 'my number' which is the number the computer is going to be storing and 'your number' which is the one that I'm going to read in. So, we then ask the user to enter a number, that's what this statement does here. Now, as far as the program is concerned, it is going to be expecting text to be entered so we have to tell it to change whatever has gone in, into an integer, because we want to do some maths with it so that's quite important. Please enter a whole number, so the user is going to enter a number. This next line down sets a value for 'my number' of zero. That is a starting value. It is quite important that we do that.