

The fetch execute cycle

What is the CPU? The CPU or Central Processing Unit is the brain of the computer. It is what makes all the decisions and where programs are executed.

The CPU basically just does two things, it fetches an instruction from memory, executes it then fetches the next instruction, executes it, fetches the next instruction... you get the idea.

This endless cycle of fetching and executing instructions is imaginatively called the fetch execute cycle. Of course the process is a little more complicated than that and involves lots of small storage locations in the CPU called registers.

You only need to know about one register, the program counter or PC. The program counter holds the address in RAM of the next instruction to be executed.

After the CPU has read the contents of the program counter it updates it so it points to the next instruction.

In this video you saw that the CPU or central processing unit controls the computer using the fetch execute cycle. You saw how this is achieved using small storage locations called registers, and learnt the purpose of one of these registers, the program counter.