

changed.

There are 3 areas that can hold data:

- Random Access Memory (RAM)
- Read Only Memory (ROM)
- Registers

RAM and ROM store

Your Spectrum contains within it a number of storage chips. All machines have a 16K ROM. This contains the operating system written by Sinclair.

This is simply a program that looks after the inputting and running of your BASIC programs and other aspects of overall control.

You cannot change it, not even by switching the power off.

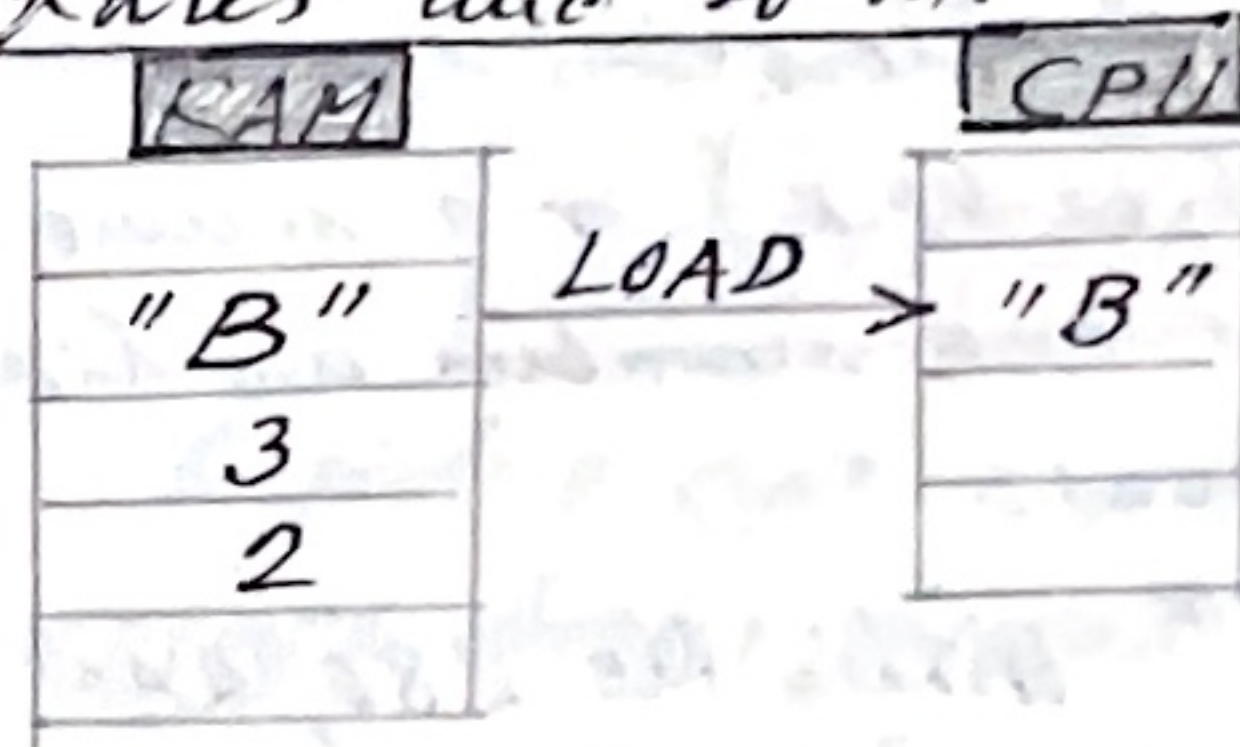
A 16K or 48K SPECTRUM contains chips offering 16K or 48K of RAM store to you.

RAM store holds your program and data areas - and you can alter these as you wish. The contents of RAM are lost when the power is off.

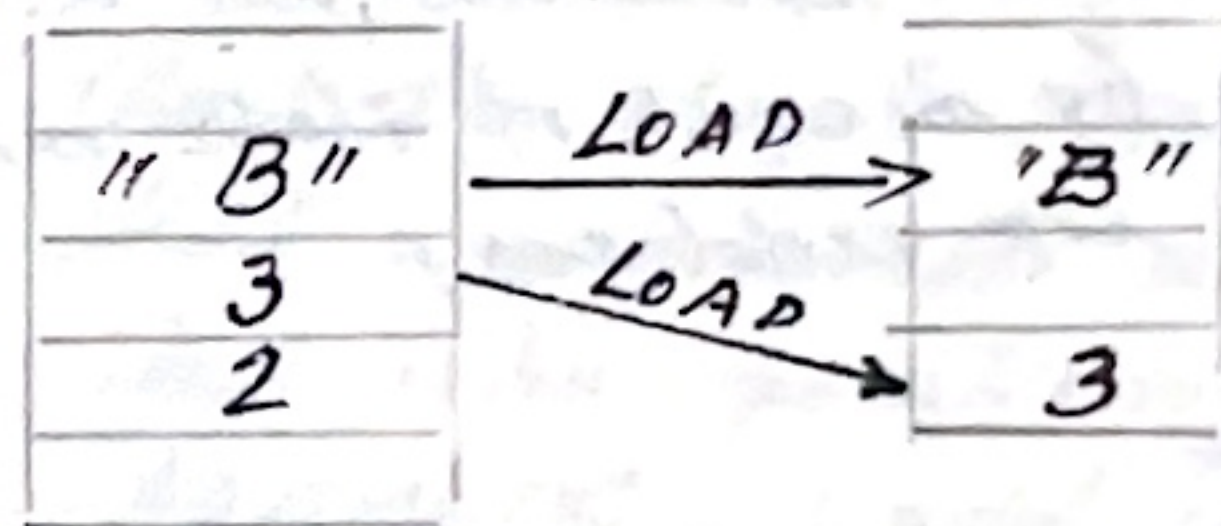
REGISTERS

Registers are special storage locations inside the Z80 chip itself.

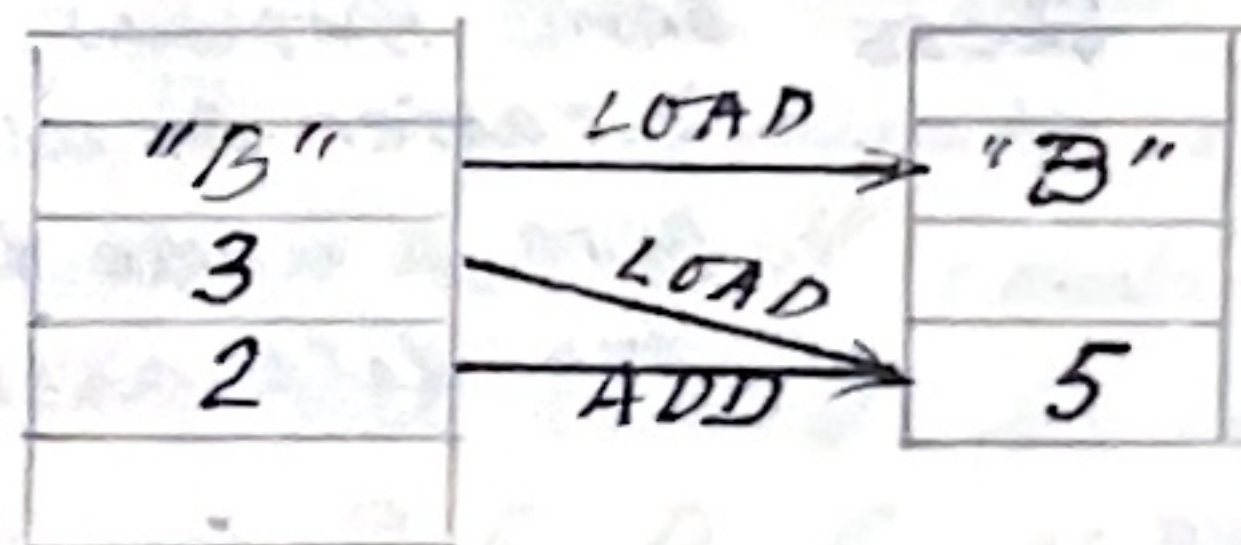
When your program (in RAM) is being obeyed (or the Sinclair operating system program in ROM is running) then these registers are used to hold the temporary results of your computation - the additions, subtractions, comparisons and so on.



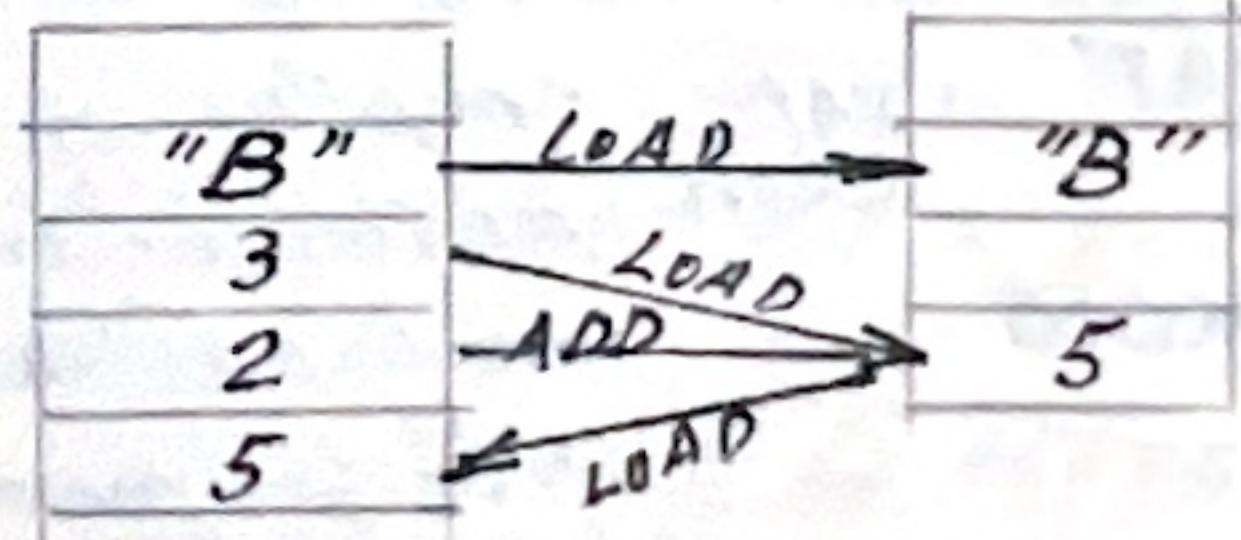
We can move data from RAM into the processor's registers.



The computer thinks of both characters and numbers as the contents of boxes.



Arithmetic operations can change data in the processor's registers.



RAM store can be altered by loading data from the registers or store.