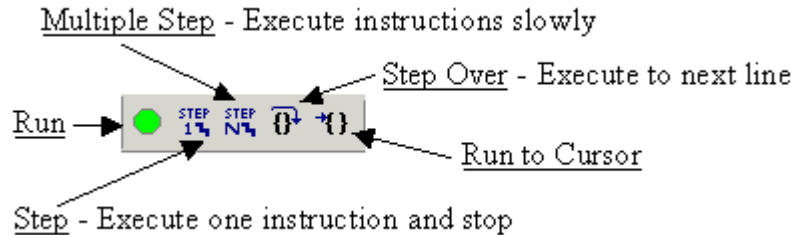
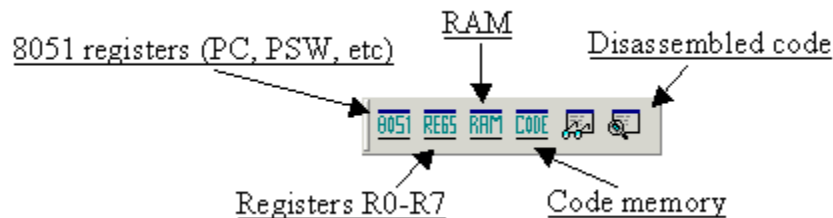


Using the debug tools

Tools in the IDE - what you can do:



Debug windows - what you can see:



Other windows available through **View-Debug Windows**

- SFRs
- External Memory

Exercise:

- Open and download blink program
- Open the following windows:

8051
Registers R0-R7
Disassembled code

- Reset the program so that PC starts at 0000.
- Step through the program using the "Step" button, and watch the program counter as it increments through the program.
- When the PC reaches 001A, notice that the program is in a loop, counting down register R5.
- Step over this instruction using the "Step Over" button. Notice we go to the next instruction.

- Continue stepping and stepping over until you understand what is happening in the loops.
- Put the cursor at the "cpl LED" instruction.
- Execute to this breakpoint with the "Run to Cursor" button.
- Step again and watch the LED.
- Write a short paragraph that describes the algorithm that is implemented by blink.asm