PIC18F

S/W: ① MPLAB IDE ② PIC loader

Create a new folder of your name
Double click on MPLABX IDE.
Go to file → New project → Microchip Embedded → Standalone project → Next
Select device → family → Advanced 8 bit MCU (PIC18) → Under device choose PIC18F4550 → Next
Select tool: simulator → Next
Select compiler → XC8 → Next
Select project name & folder → Give name → select project location → uncheck 'set as main project option' click finish.

* Adjustment for bootloader:-
from project window - Right click on project name → Properties
Select XC8 linker
In option categories → select Additional options →
In code offset & write 800 → click OK

Compiling project:-
Go to project window → Right click on project folder & Select build or clean & build

Go to file → New → C file → Give name → Type → save

PIC loader:-
Connect USB cable to board.
open PICloader → Programs → Settings → select USB to Serial Com port → OK
Go to programs → Break/Reset Mode → click Reset switch on board
Go to programs → Bootloader Mode
File → open → Browse
Project folder → dist → default → production → choose your hex file
Go to programs → write device
Press reset on the board.

Steps to Run a Program in Keil µvision 3

STEP 1: CREATING NEW PROJECT

1) Open Keil µvision 3 from Start Menu
2) Select New Project from the Project Menu
3) Name the project 'projectname.uv2'.
4) Click on the Save Button. → The device window will be displayed.
5) Double Click on Atmel → select AT89C51 → Press OK.
6) Click File Menu and select new → new window will open up in the Keil IDE.
7) Write the Program.
8) Click on File menu and select Save as.
9) Name the file as "filename.asm" and Click the Save Button.

STEP 2: ADDING FILE TO THE PROJECT

1) Expand Target 1 in the Project Window.
2) Right click on Source Group and select add files → add the .asm file.
3) Right Click on file.asm and then click on Build All.
4) Remove the errors from the program if any.

STEP 3: GENERATING HEX FILE

1) Click on Flash Tools → Select Configure Tools
2) Click on Target tab and put frequency as 11.0592MHz.
3) Click on Output tab and tick on "Create Hex File".
4) Now right click on filename.asm in Project window and click on rebuild all.
5) Observe output window to see if any errors.

STEP 4: FLASH MAGIC CONFIGURATION

1) Double click on Flash Magic Option from Desktop.
2) Click on Options Tab → Select Advanced Options.
3) Select Hardware Configuration → Untick all options → OK.
4) a) Select Device as 89V51RD2
   b) Serial com port- COM1
   c) Baud Rate- 9600
5) Browse the hex file and click on Start to burn program in microcontroller.