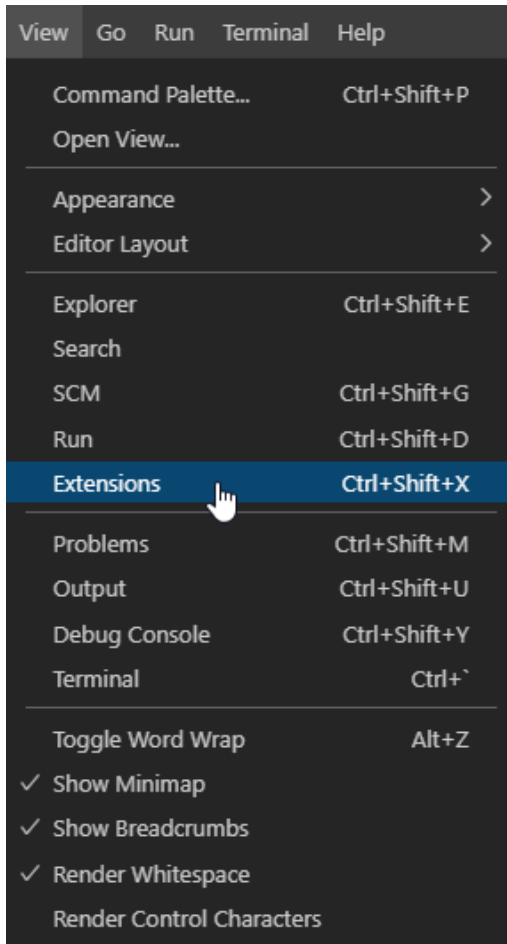


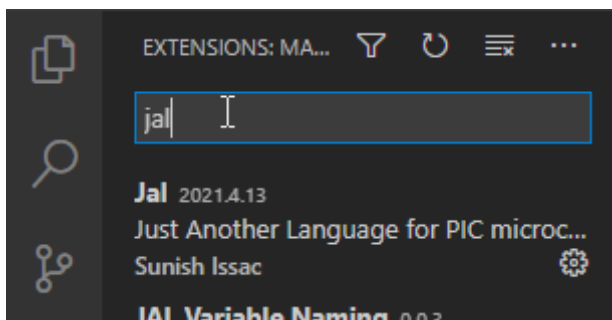
How to install the JAL plug-in and start the compiler in Visual Studio Code

Install the JAL Visual Studio Code plug-in

From View → Extensions open the extensions bar which will appear bar on the left.



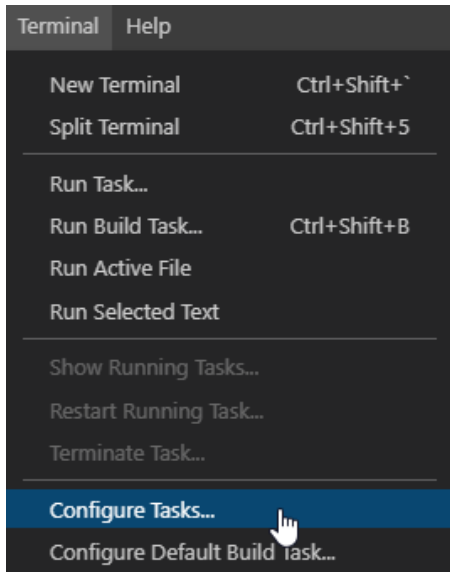
Type 'jal' in the search bar and you will find the JAL extension



Install the extension.

Installing a task to run the compiler

Select Terminal → Configure Tasks



In the tasks.json file replace the example by the contents of the file 'tasks.json'.

This looks as follows:

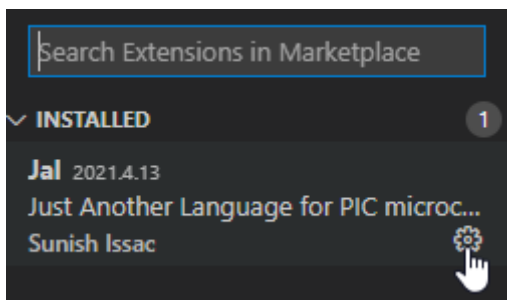
```
tasks.json X
C: > Users > Rob Game > AppData > Roaming > Code > User > {} tasks.json > ...
1  {
2  // See https://go.microsoft.com/fwlink/?LinkId=733558
3  // for the documentation about the tasks.json format
4  // prefilled tasks.json for compiling a JAL file
5  "version": "2.0.0",
6  "tasks": [
7    {
8      "label": "Compile JAL File",
9      "type": "process",
10     "command": "${config:jal.paths.exePath}",
11     "args": [
12       "${file}",
13       "-s",
14       "${config:jal.paths.LibPath}"
15     ],
16     "presentation": {
17       "reveal": "always",
18       "panel": "new"
19     },
20     "problemMatcher": [],
21     "group": {
22       "kind": "build",
23       "isDefault": true
24     }
25   }
26 ]
27 }
```

Or in plain text (copy paste this in the tasks.json):

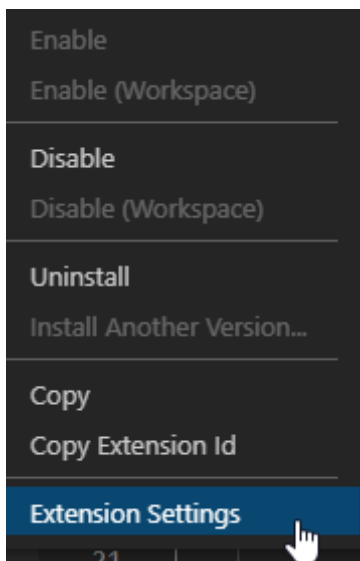
```
{
  // See https://go.microsoft.com/fwlink/?LinkId=733558
  // for the documentation about the tasks.json format
  // prefilled tasks.json for compiling a JAL file
  "version": "2.0.0",
  "tasks": [
    {
      "label": "Compile JAL File",
      "type": "process",
      "command": "${config:jal.paths.exePath}",
      "args": [
        "${file}",
        "-s",
        "${config:jal.paths.LibPath}"
      ],
      "presentation": {
        "reveal": "always",
        "panel": "new"
      },
      "problemMatcher": [],
      "group": {
        "kind": "build",
        "isDefault": true
      }
    }
  ]
}
```

Configuring the JAL extension

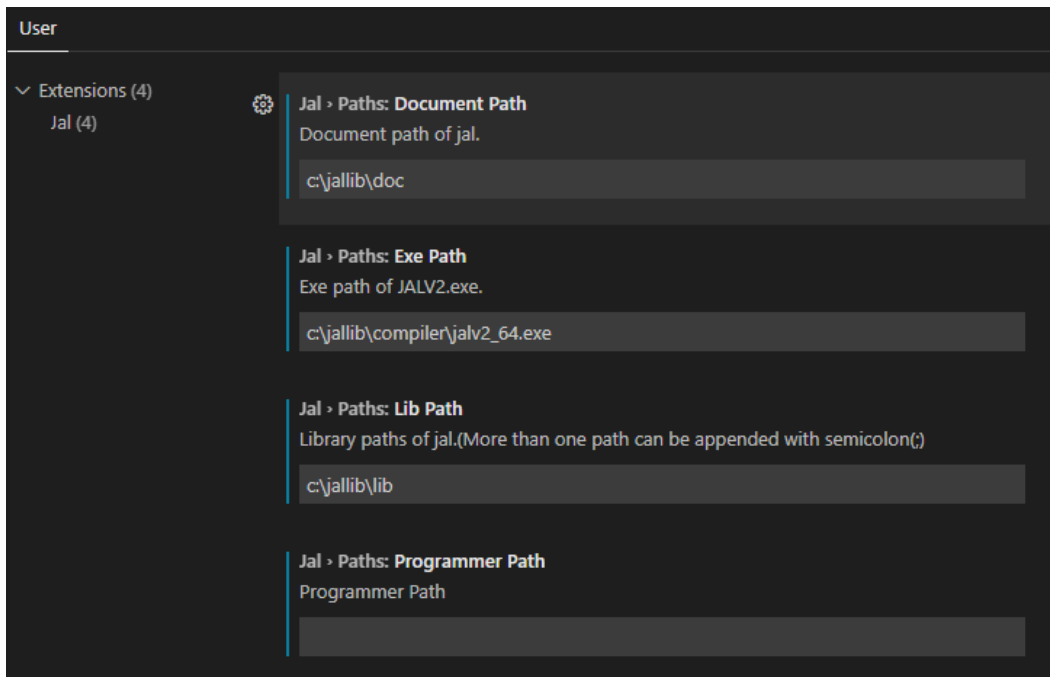
On the installed plug-in click on the 'manage' (or configuration) wheel.



Select Extension Settings

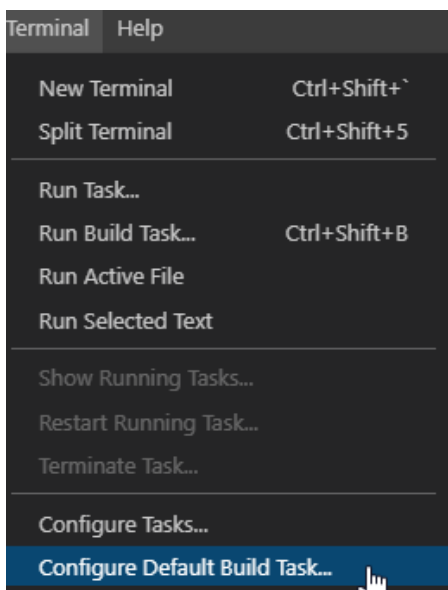


Set the paths to the JAL documentation, the JAL compiler, the JAL libraries and programmer (if present), example below.



Activating the compiler

You can set the default build task to run the compiler under Terminal → Configure Default Build Task



The compiler can be activated by:

- Terminal → Run Task ... and selecting the task Compile JAL File
- Terminal → Run Build Task
- Ctrl-shift-B

If you have more files open, always activate the compiler from the main program.

The compiler output appears at the bottom of the screen in a terminal window.

```
jal jalv25r5 (compiled Apr  5 2021)
generating p-code
1597 tokens, 375210 chars; 8263 lines; 13 files
generating PIC code pass 1
generating PIC code pass 2
405 branches checked, 0 errors
1073 data accesses checked, 0 errors
276 skips checked, 0 errors
writing result
Code area: 4102 of 8192 used (words)
Data area: 334 of 1024 used
Software stack available: 80 bytes
Hardware stack depth 5 of 16
0 errors, 0 warnings
```

If a compiler error occurs you can jump to that error in the Editor by pressing ctrl-click

```
jal jalv25r5 (compiled Apr  5 2021)
Open file in editor (ctrl + click)
D:\PIC\Projects\2021\Library_Bluetooth_HC-05\16f15325_bluetooth_hc05.jal:223: "x" not defined
D:\PIC\Projects\2021\Library_Bluetooth_HC-05\16f15325_bluetooth_hc05.jal:223: unexpected token: x
2 errors, 0 warnings
```