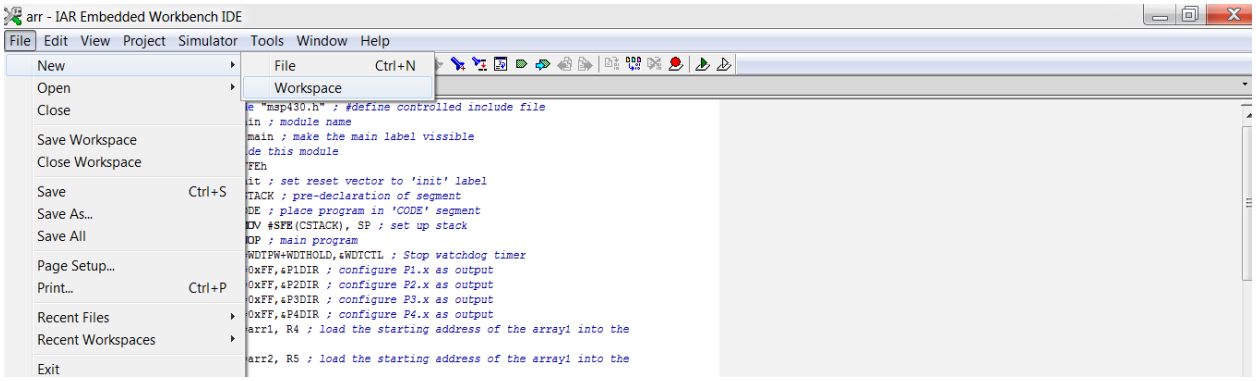
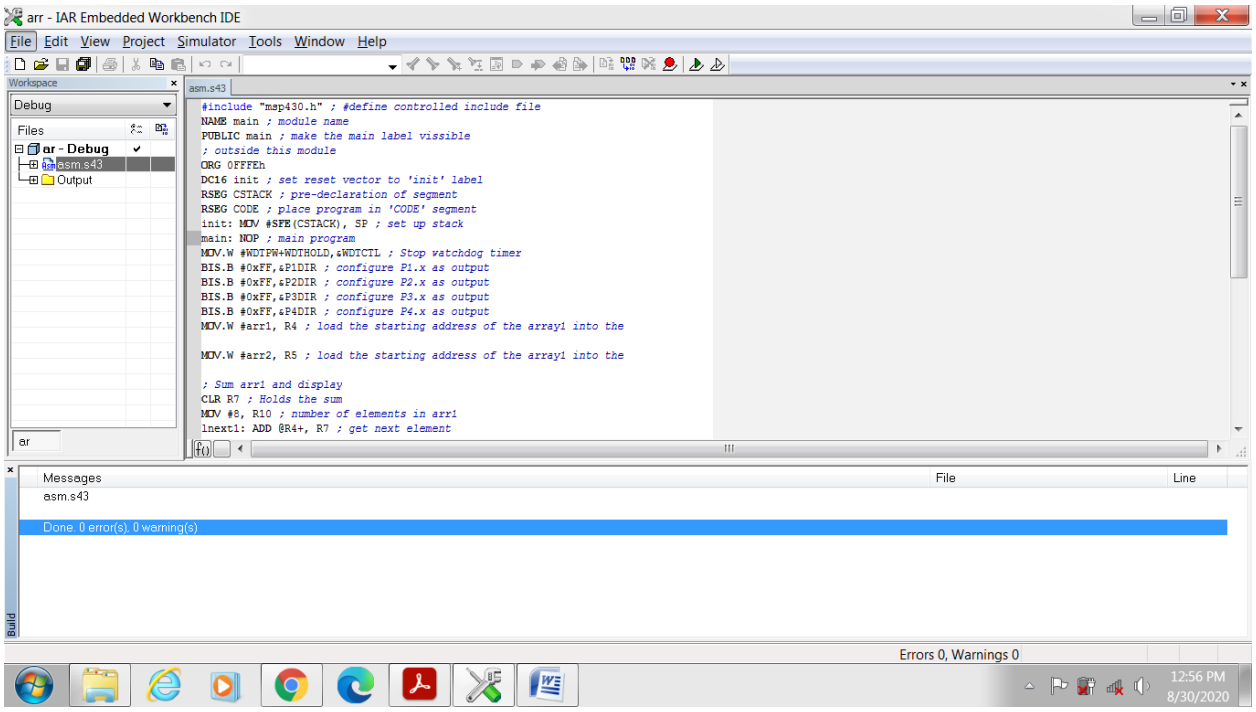
Experiment 6

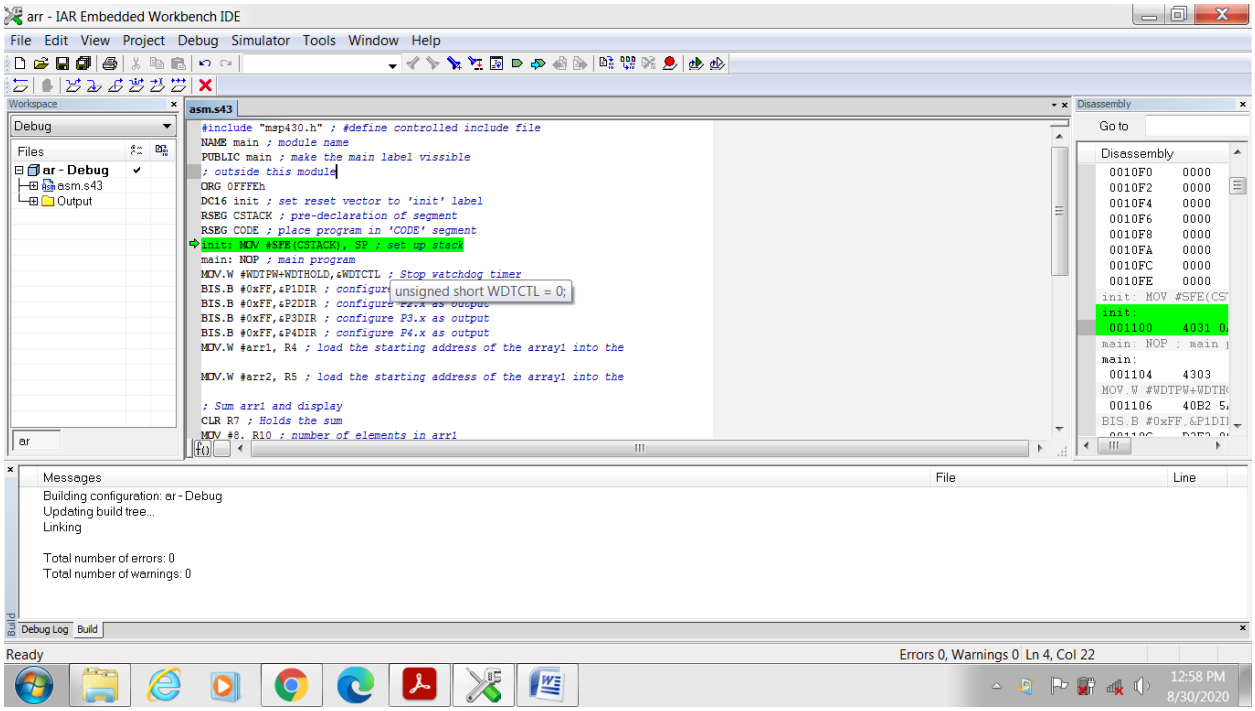
1. Open IAR Workbench to perform the following programs.
2. Write an assembly language program for summing up two integer arrays.
3. Open new workspace and then make new project file.



4. Add the program file and then build it.

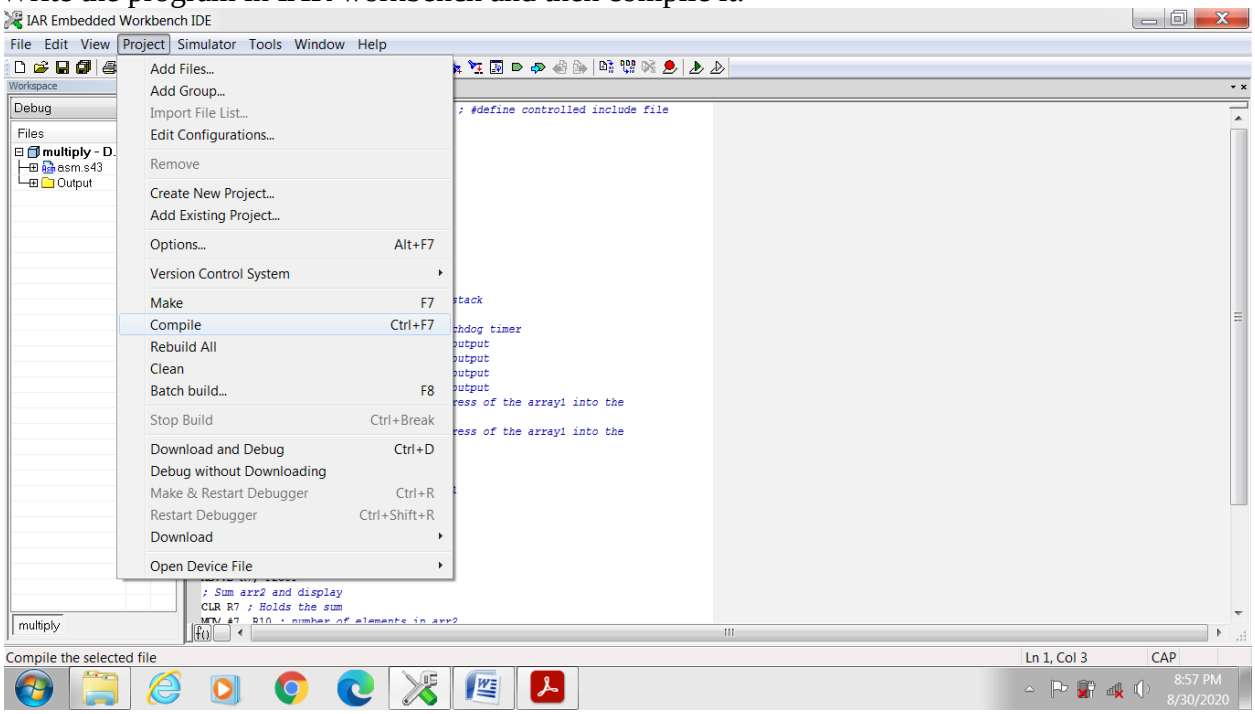


5. Then click on download and debug and check the disassembly.

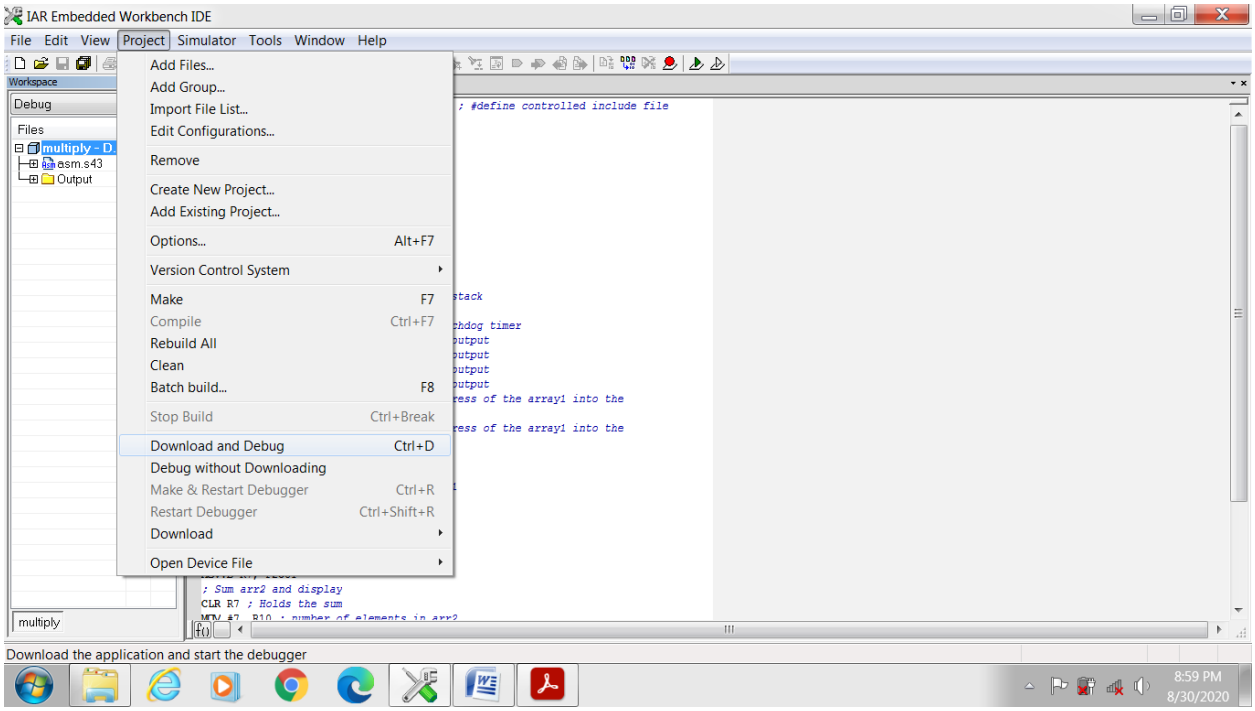


7. Write a subroutine *m8x8sa* using the MSP430 assembly language to multiply two signed 8-bit integers and return back the 16-bit result. Use shift-and-add method to multiply two numbers. Pass parameters through general-purpose registers.

- Write the program in IAR workbench and then compile it.

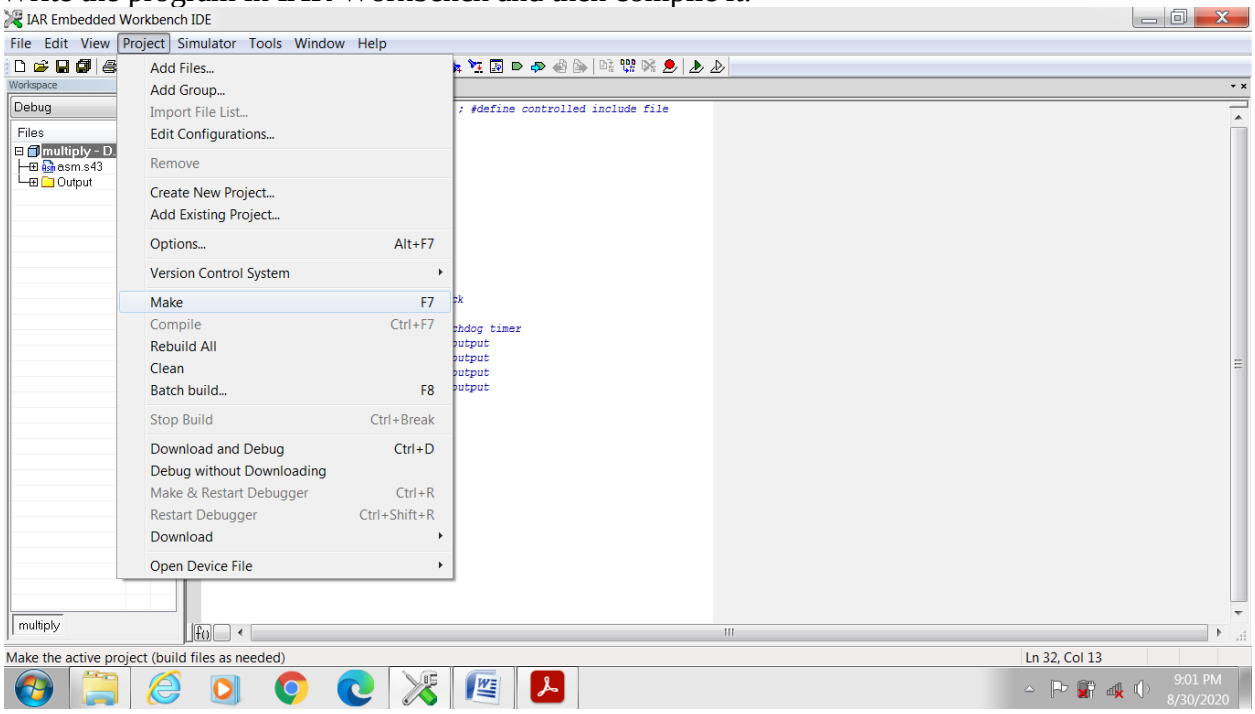


- Build the project and click on download and debug.

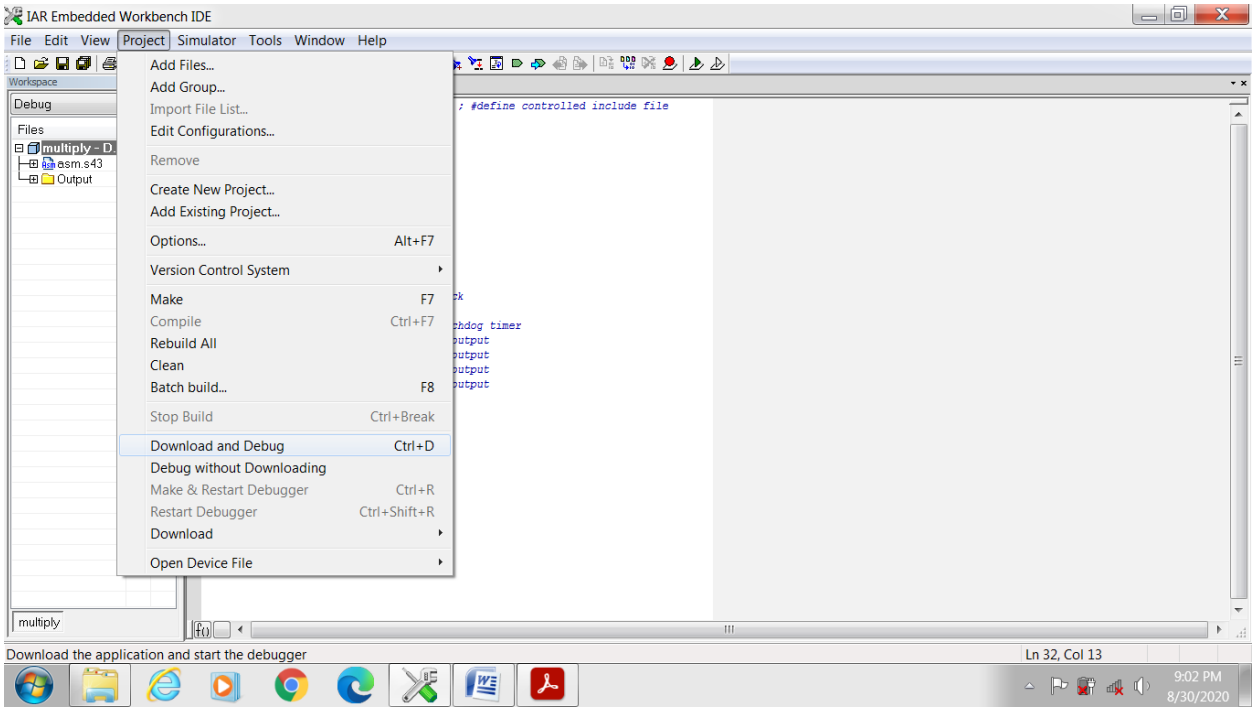


8. Write a subroutine *m8x8h* using the MSP430 assembly language to multiply two signed 8-bit integers and return back the 16-bit result. Use hardware multiplier of the MSP430 to perform multiplication.

- Write the program in IAR Workbench and then compile it.



- Then build the program and click on download and debug.


IAR Embedded Workbench IDE
File Edit View Project Simulator Tools Window Help
Add Files...
Add Group...
Import File List...
Edit Configurations...
Remove
Create New Project...
Add Existing Project...
Options... Alt+F7
Version Control System
Make F7
Compile Ctrl+F7
Rebuild All
Clean
Batch build... F8
Stop Build Ctrl+Break
Download and Debug Ctrl+D
Debug without Downloading
Make & Restart Debugger Ctrl+R
Restart Debugger Ctrl+Shift+R
Download
Open Device File
Workspace
Debug
Files
multiply - D...
asm.s43
Output
multiply
; #define controlled include file
Download the application and start the debugger
Ln 32, Col 13
9:02 PM
8/30/2020