Create CUDA Project For CSC3150 Assignment 4

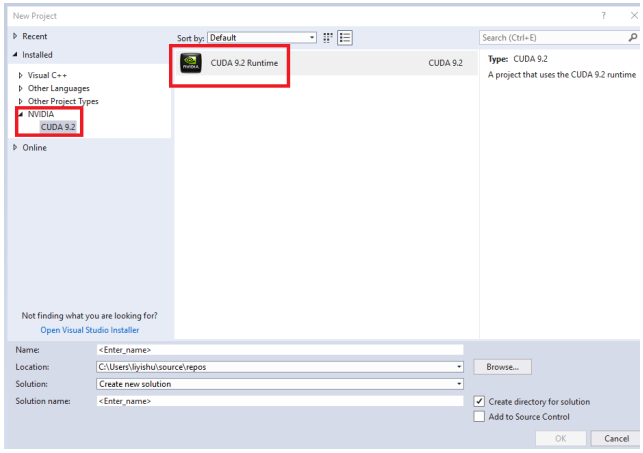
Environment:

- Win 10
- VS2017
- CUDA 9.2
- NVIDIA Geforce GTX 1060
- Compute capacity: 6.1

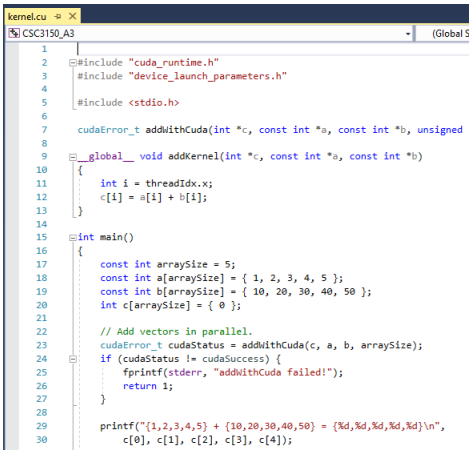
Configuration steps:

1. Launch VS2017

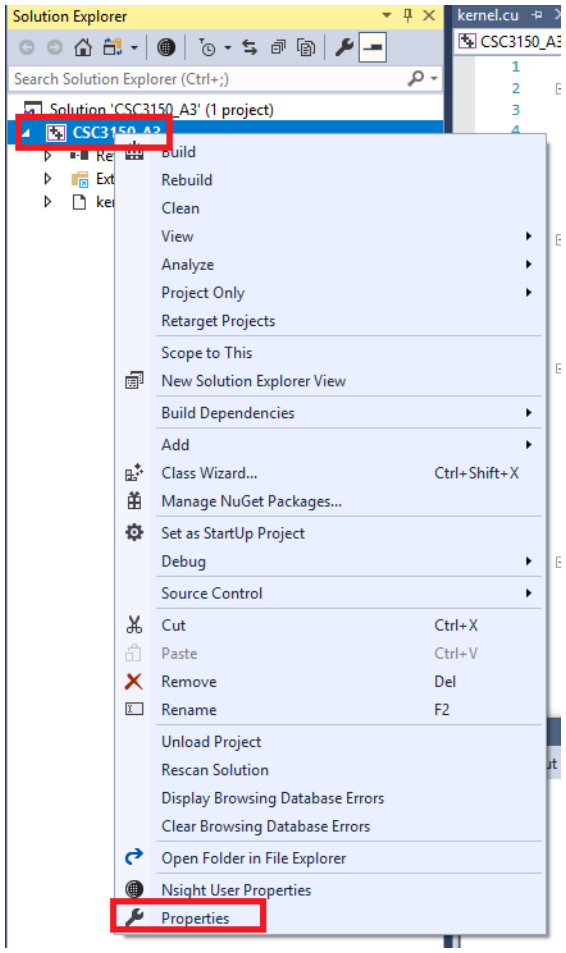
2. Create CUDA project
   (If you're using PCs in TC301, change the project storing location in this step. Please ensure storing your CUDA project in D disk, rather than C disk, where will auto delete users' data every 30 days.)

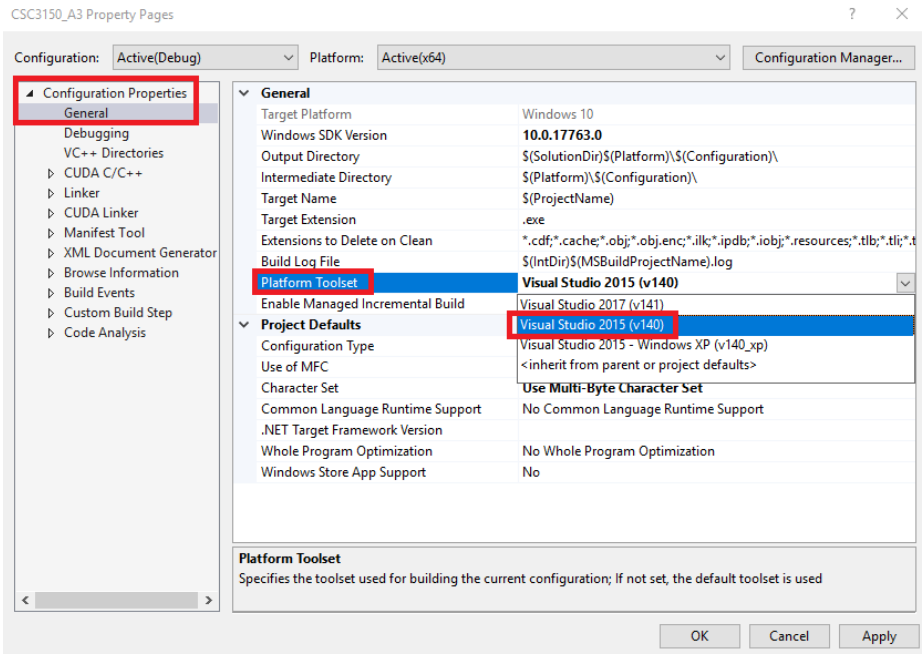


3. There will be a "kernel.cu" automatically created.

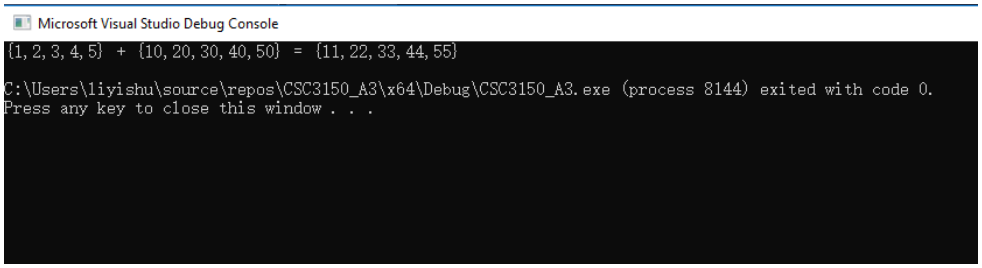


4. Select and right click the project, open its properties. Update the platform toolkit as ‘Visual Studio 2015(v140)’

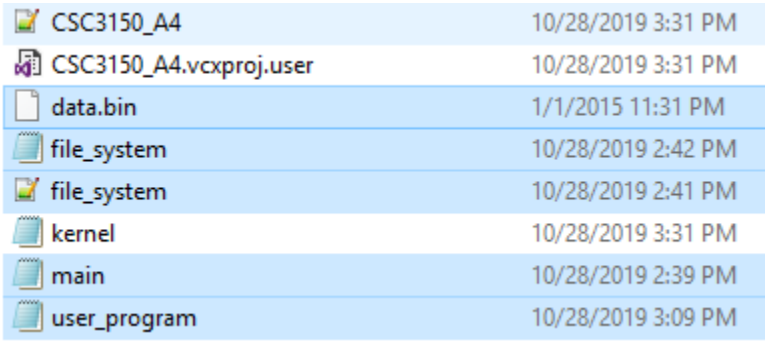




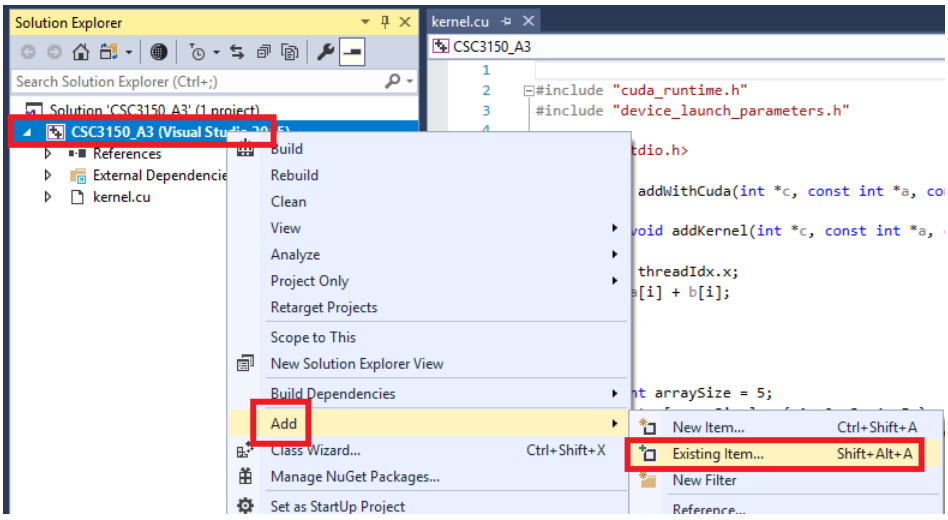
5. Press “Ctrl”+”F5” to run the project. If the calculation results being displayed correctly in console, it means your CUDA project settings is correct.

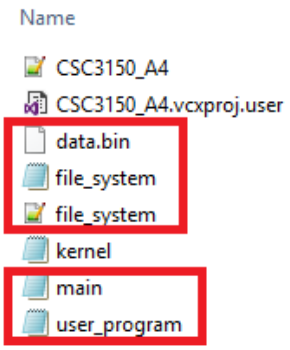


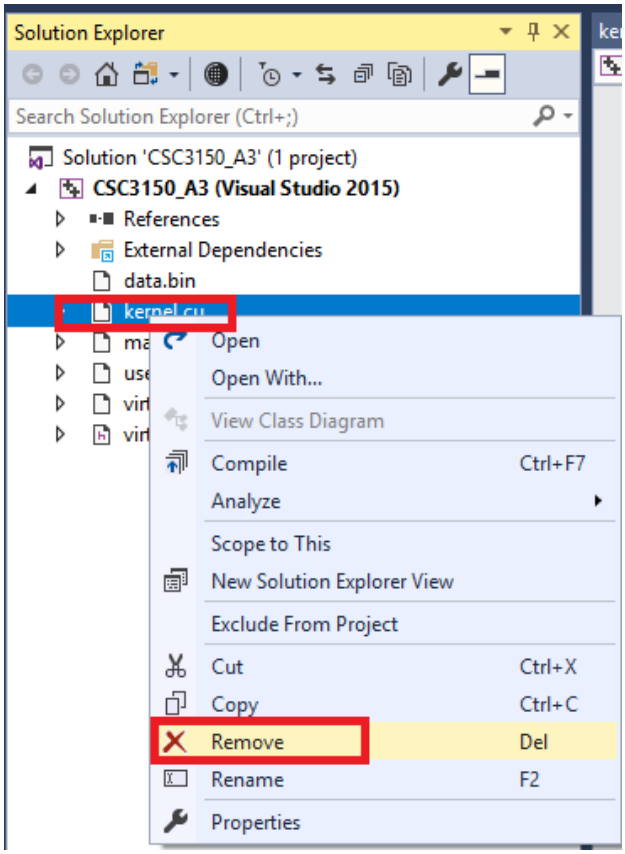
6. Copy provided source code into your project folder.
(‘main.cu’, ‘user_program.cu’, ‘file_system.cu’, ‘file_system.h’, ‘data.bin’)

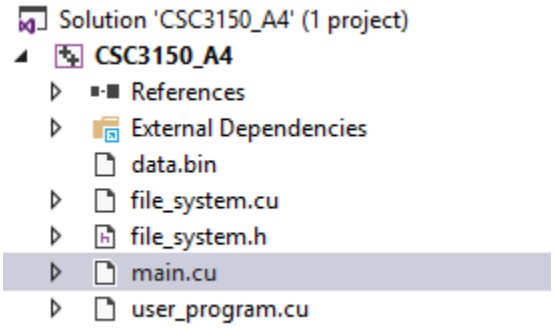


7. In Visual Studio, select and right click your project, add exiting items (the source codes) into your project. And remove the ‘kernel.cu’ from your project.

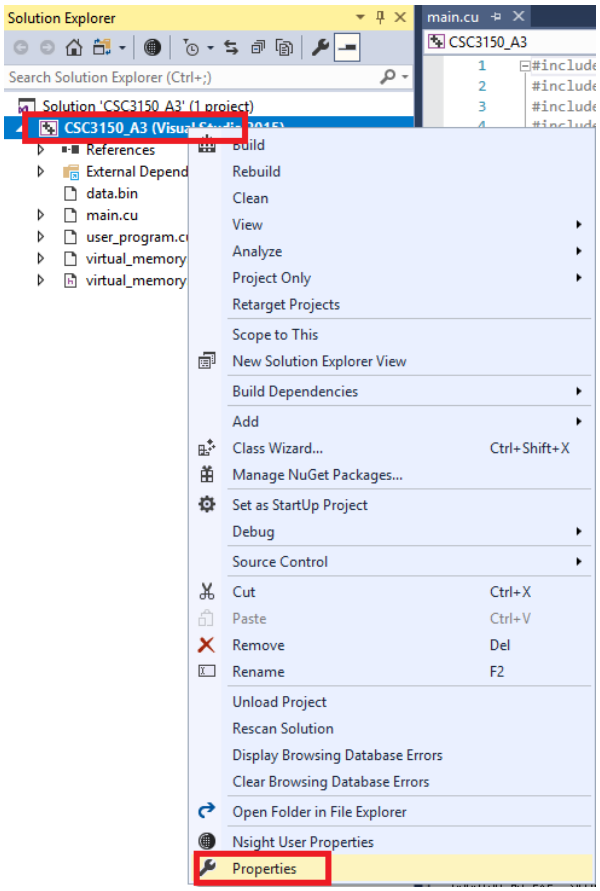


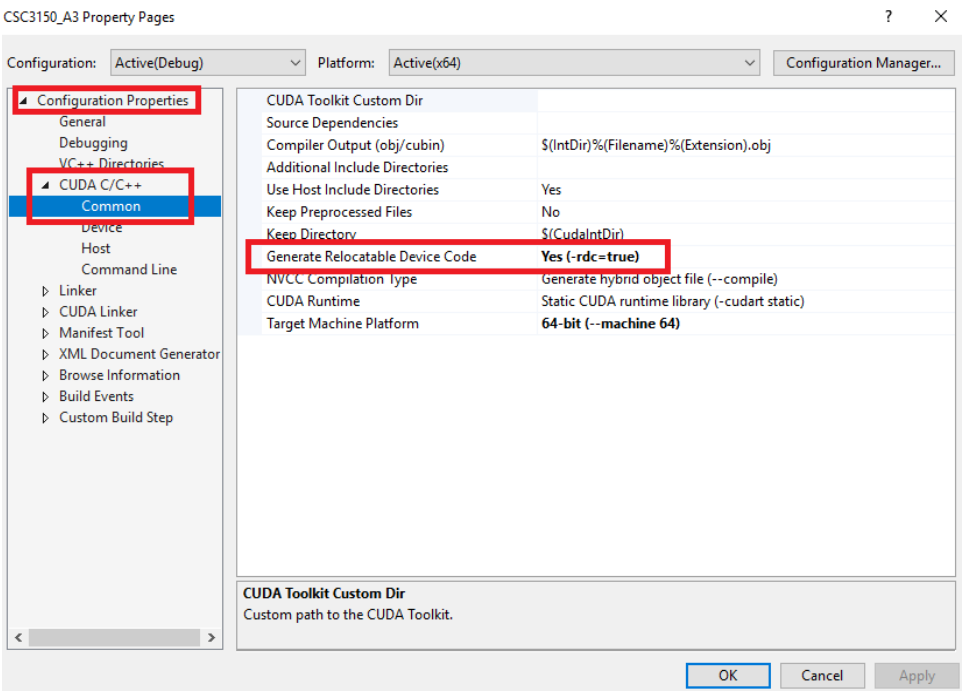

Name
CSC3150_A4
CSC3150_A4.vcxproj.user
data.bin
file_system
file_system
kernel
main
user_program


Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'CSC3150_A3' (1 project)
CSC3150_A3 (Visual Studio 2015)
References
External Dependencies
data.bin
kernel.cu
Open
Open With...
View Class Diagram
Compile Ctrl+F7
Analyze
Scope to This
New Solution Explorer View
Exclude From Project
Cut Ctrl+X
Copy Ctrl+C
Remove Del
Rename F2
Properties

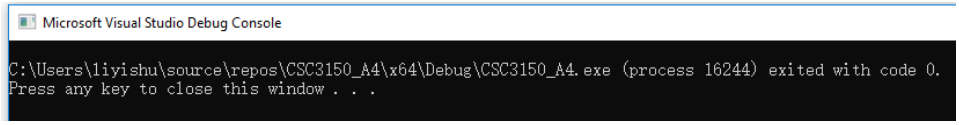

Solution 'CSC3150_A4' (1 project)
CSC3150_A4
References
External Dependencies
data.bin
file_system.cu
file_system.h
main.cu
user_program.cu

8. Select the project and right click it. Open its properties, allow the CUDA files to generate relocatable device code.





9. For those three cuda files (.cu), right click to compile them. (Or use ‘Ctrl’+’F7’).
   Then press “Ctrl”+”F5” to run your program.
   For the provided template, you will get nothing being displayed in output as below:



10. In “file_system.cu”, start your programming.