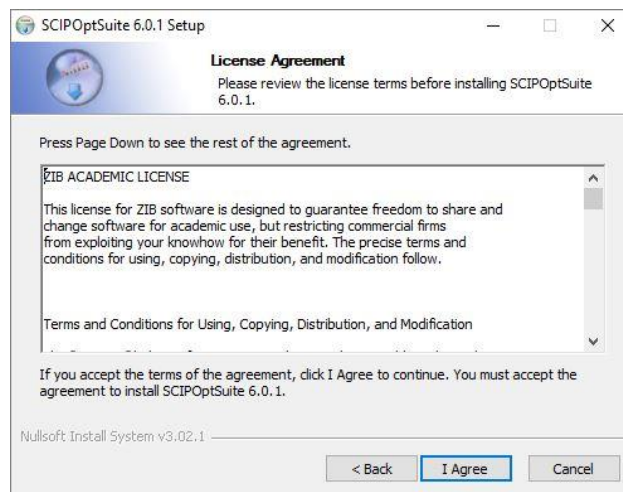
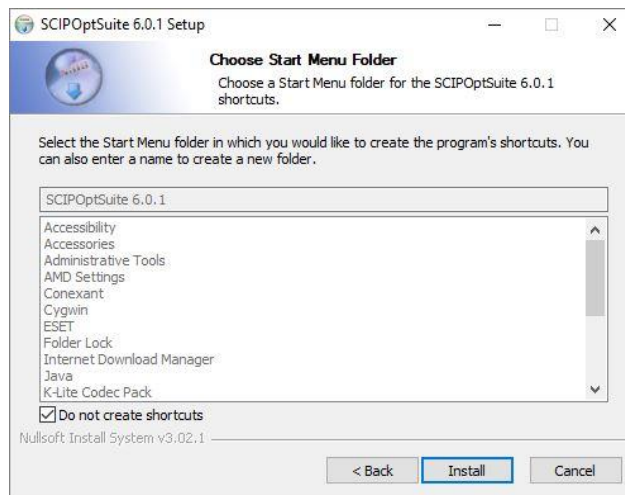
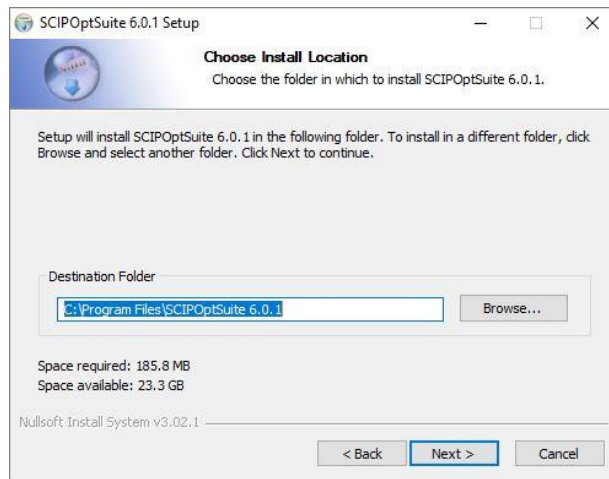


¹Installing and Using SCIP on MS Windows

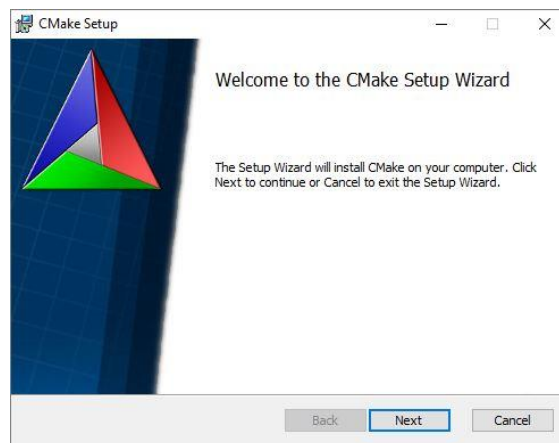
Step 1: download and install SCIOptSuite from <https://scip.zib.de> as follows:

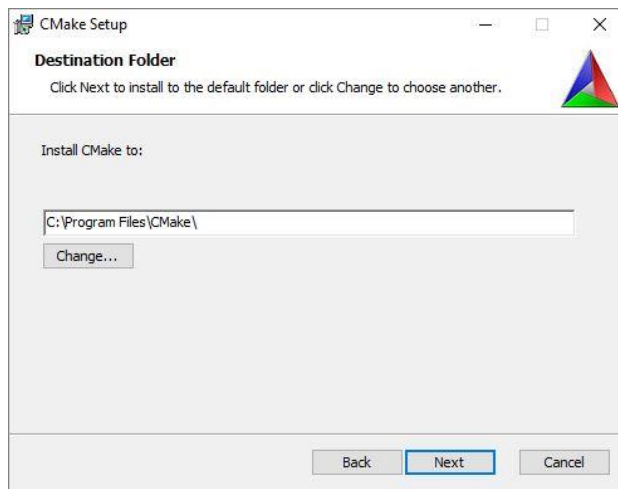
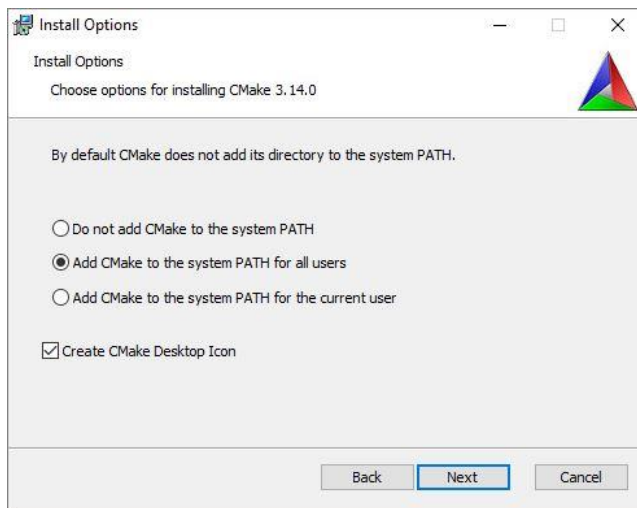
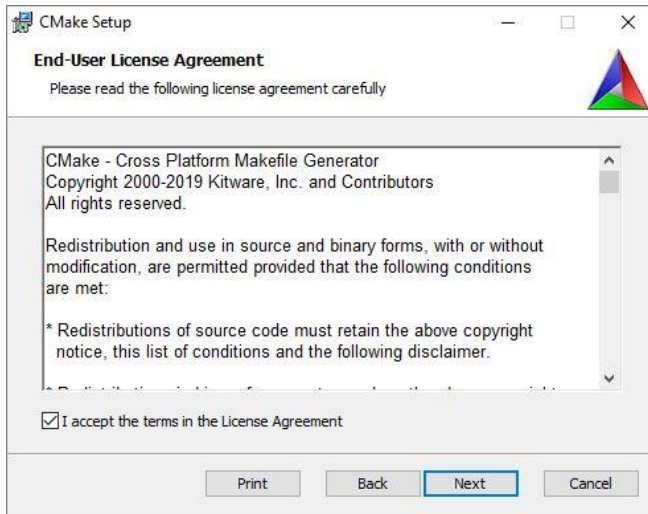


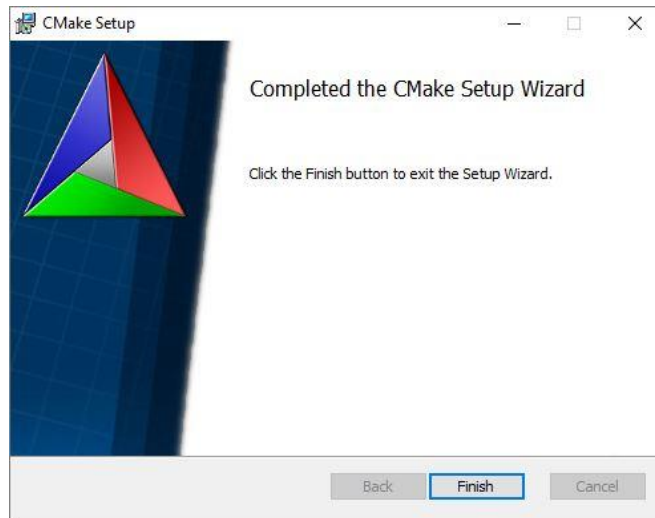
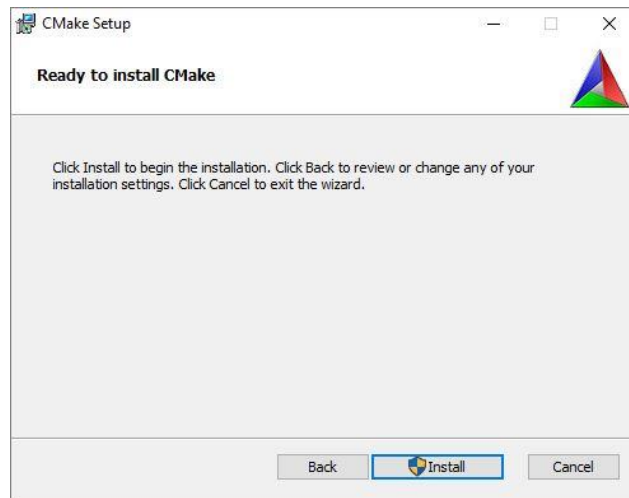
¹ Prepared by Samad Soleimani (The Energy Research Institute of Iran-NRI).
Email: samad1388@gmail.com



Step 2: you need to download and install CMake from <https://cmake.org/download/>.



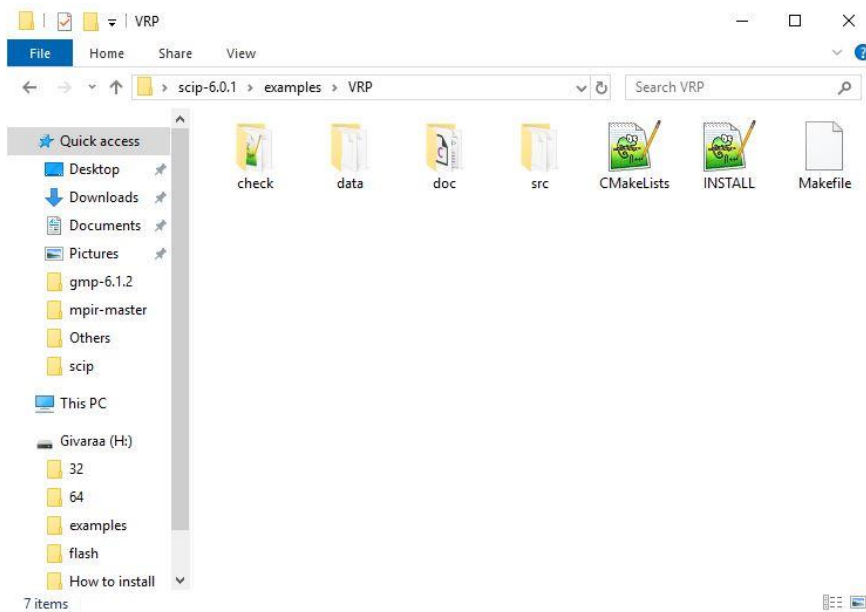




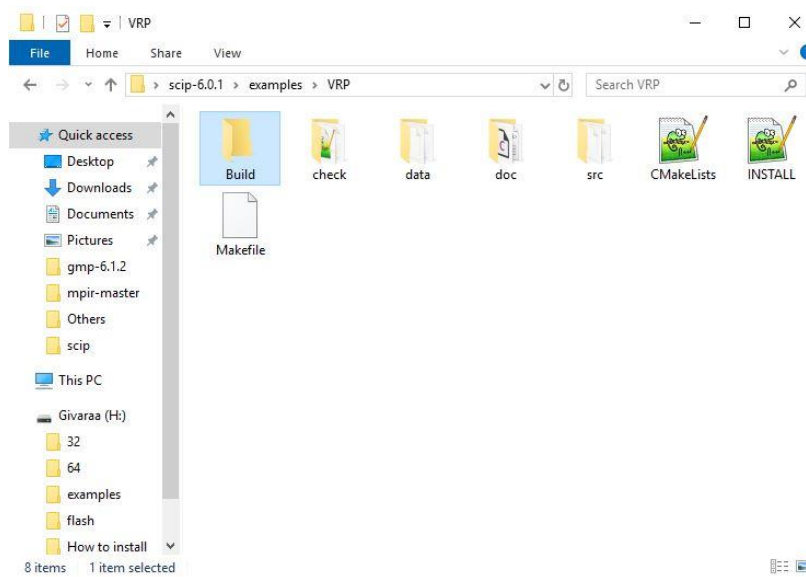
Step 3: You also have to download and install Visual C++ (Here we do with MS Visual Studio 14 -2015)

Step 4: Example

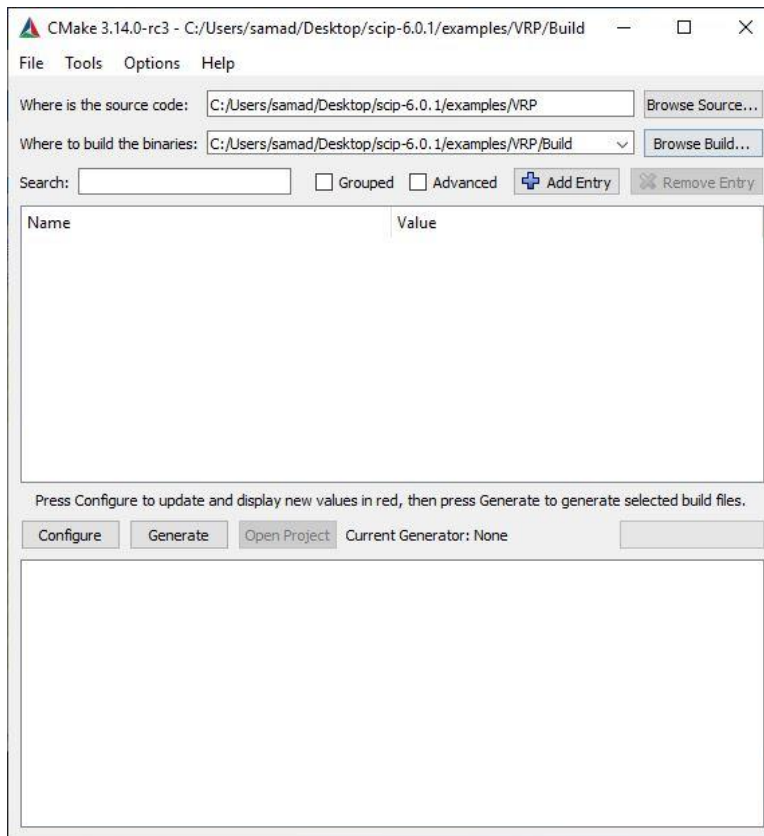
We here outline how to run an example (VRP) in Windows. You need to download Source Code from SCIP page. Let assume that you have the example in `..\scip-6.0.1\examples\VRP`.



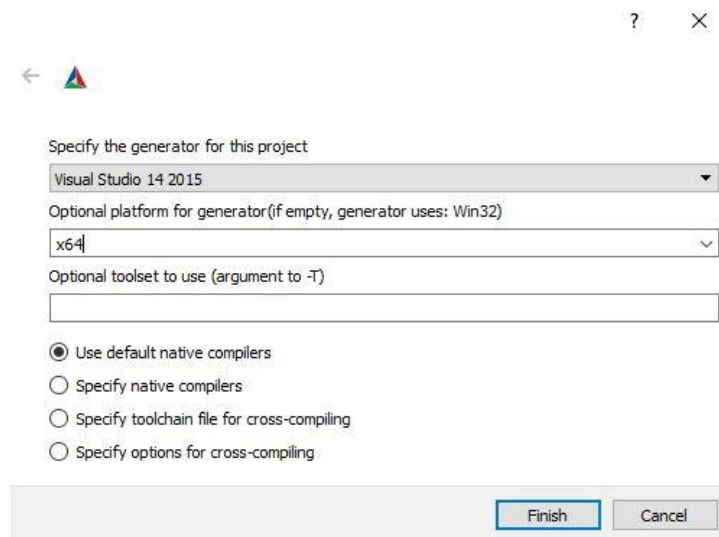
Create and add a directory as “Build” in the VRP directory.



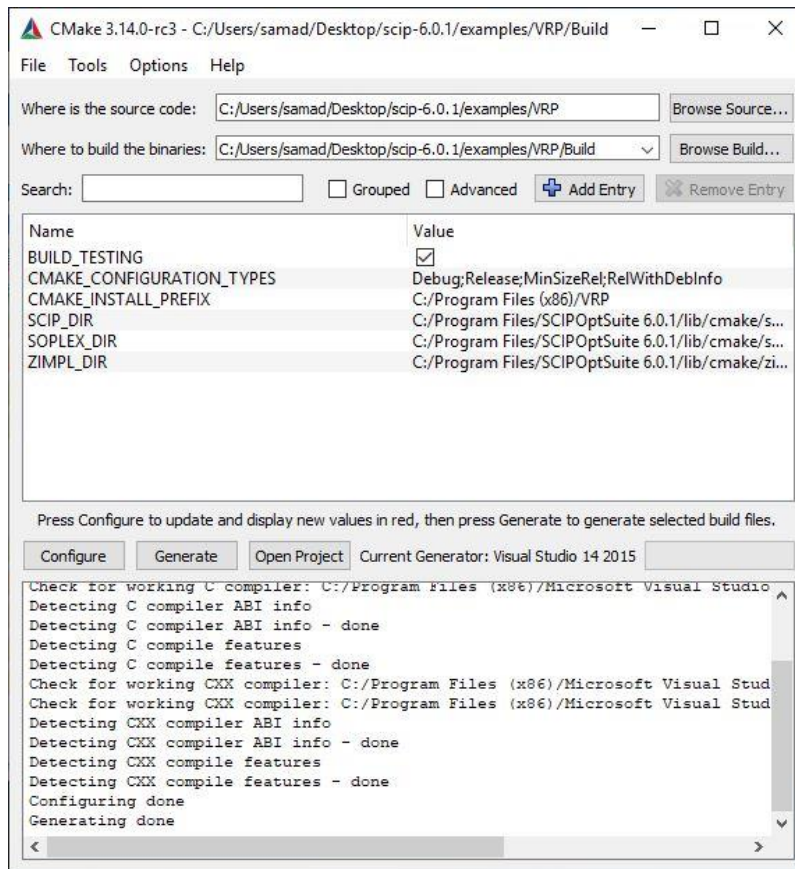
Then run CMake and fill the text boxes based on the address you have your SCIP source code. Here we copied the source code on the desktop as follows.



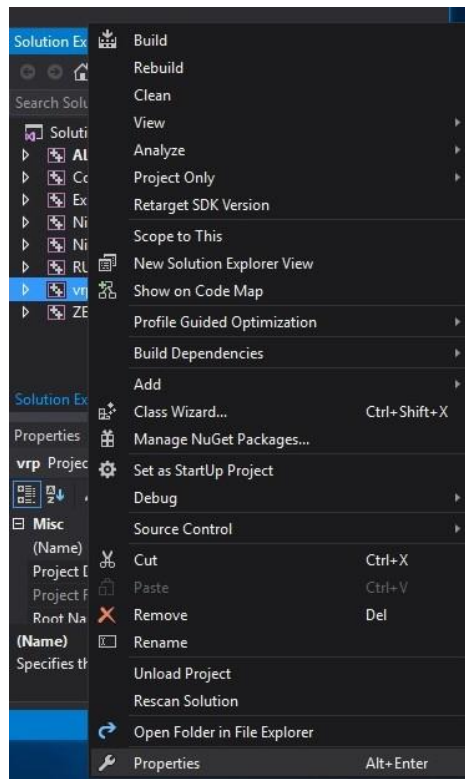
Once you filled the form, click on “Generate”. You will see the following Window where you need to select a generator and a platform. We have used MS Visual Studio 14-2015, thus, select it in the generator section. We have also Windows 10 x64 installed. Finally click on “Finish”



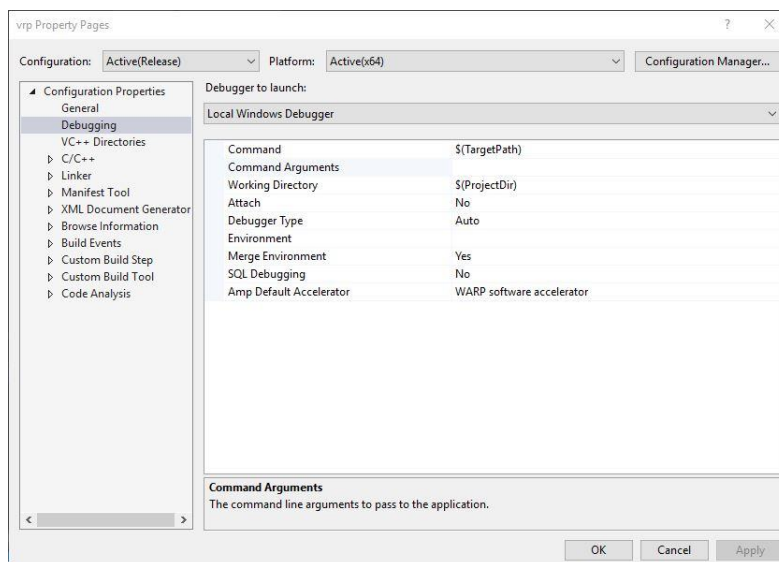
The below window will appear.

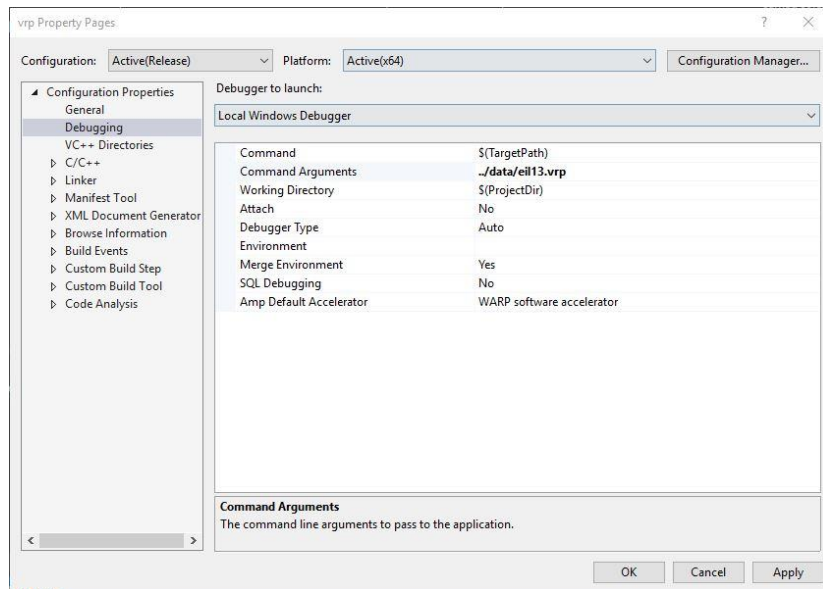


If successful, you can open the project (VRP) by Clicking on “Open Project” (in the middle of the window. For next time run, you can open the project by clicking on “*.sln” file in the “Build” directory of the example. Then set the VRP as start up project by doing right click on VRP in the right top window of MS VS and selecting “Set as StartUp Project”. Now you are ready to compile and run.

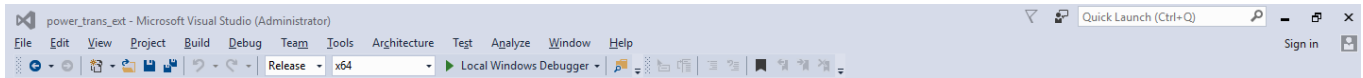


If you have an external input file to be addressed, you may do it in the code or you also can open the “Properties” window in the previous menu. Then on the side bar select “Debugging” under “Configuration Properties” in “Command Arguments” section, enter the input file address (for example “../data/eil13.vrp”).

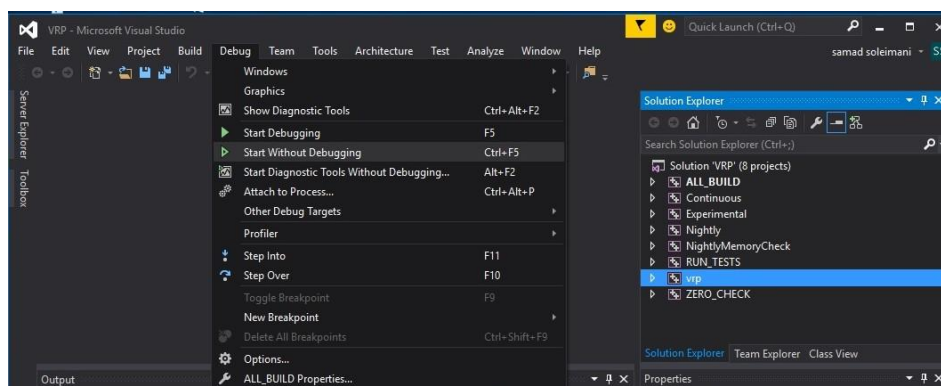
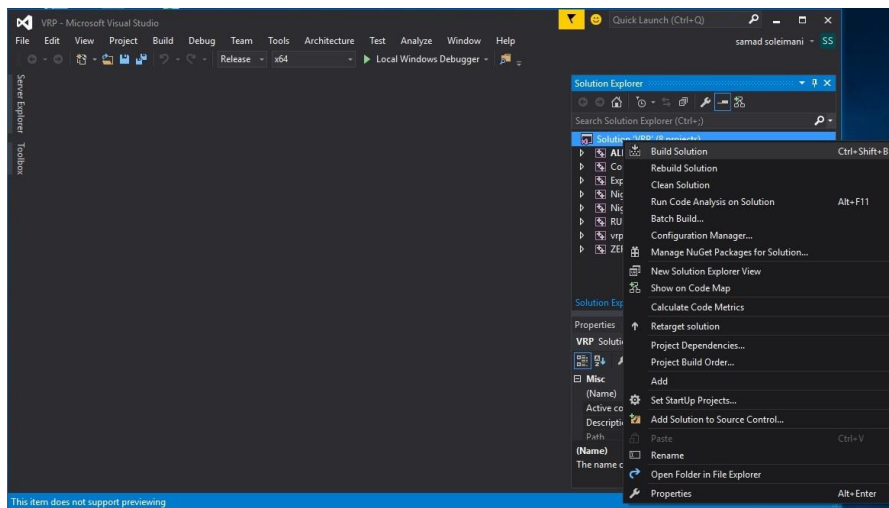




Select “release” in the bar menu as follows:



Now you run your model by building as indicated in the figures bellow. Note that you may click on “start without debugging” in “Debug” tab.



The outcome will be:

```
C:\Windows\system32\cmd.exe
First Solution : +6.7200000000000e+02 (in run 1, after 1 nodes, 0.00 seconds, depth 0, found by <simplerounding>)
Gap First Sol. : infinite
Gap Last Sol. : 2.22 %
Primal Bound : +2.4700000000000e+02 (in run 1, after 3 nodes, 1.00 seconds, depth 4, found by <relaxation>)
Dual Bound : +2.4700000000000e+02
Gap : 0.00 %
Avg. Gap : 100.00 % (100.00 primal-dual integral)
objective value: 247
E1_0 2 (obj:0)
E2_0 1 (obj:14)
E3_0 1 (obj:23)
E5_3 1 (obj:12)
E6_0 1 (obj:21)
E7_2 1 (obj:7)
E7_4 1 (obj:16)
E8_0 1 (obj:30)
E8_5 1 (obj:10)
E9_0 1 (obj:27)
E10_6 1 (obj:10)
E11_0 1 (obj:25)
E11_4 1 (obj:13)
E12_9 1 (obj:18)
E12_10 1 (obj:10)
T_1 1 (obj:0)
T_3_5_3 0.5 (obj:0)
T_8_5_8 0.5 (obj:0)
T_2_7_4_11 1 (obj:0)
T_9_12_10_6 1 (obj:0)
Press any key to continue . . .
```