Build an Executable for your VI and Flash It to the Robot

How to make a VI run automatically when the robot is turned on.

1) Set your default values

2) Go to Edit > Make Current Values Default
3) If you have Shared Variables on the robot, then you need to check Disable Autodeploy Variables or it will the vi will be stopped on the robot when you launch the vi on the computer. This is a problem if you ever try to run your vi on the computer with other robots as the Shared Variables will not be deployed and you will get an error indicating that. With it unchecked, launching you vi on the computer will deploy the variables if they are not already.
4) In the Project window, right click Build Specifications (the one at the bottom, not Build Specifications under the FPGA Target) > New > Real-Time Application.
5) Give your application a **SHORT** name under “Build specification name”; leave the directory paths at their default values. If the name is too long you will get an error!
6) Under Source Files, click your VI and then click the right arrow by Startup VIs to add it to the Startup VIs list. These files will run when the robot turns on.

7) Hit Build button and wait for the build to complete.
8) After the build finishes, find your new real time application under Build Specifications and:
   a. Right click > Set as startup
   b. Right click > Run as startup

9) If LabView prompts you to reboot the robot, hit ok and wait a minute for the robot to reboot and you’re done!
10) If you get the generic file I/O error 1st try a shorter name for the Application. If that doesn’t work try changing these settings – probably check Disconnect Type Definitions first.

And then repeat Steps 7 and 8 to build & flash to the robot.