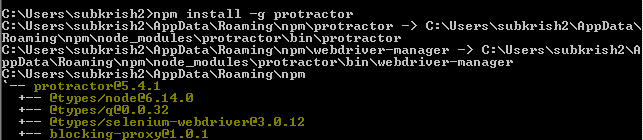
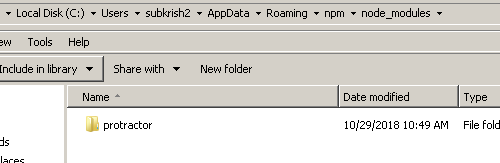
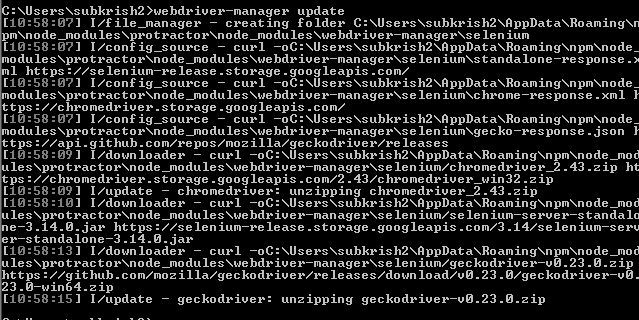
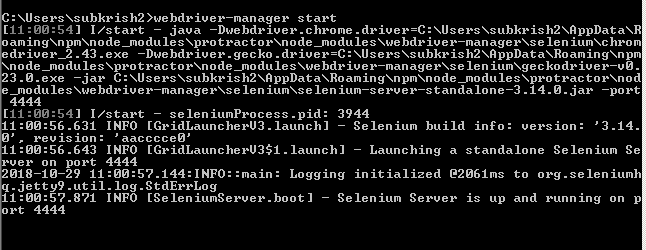
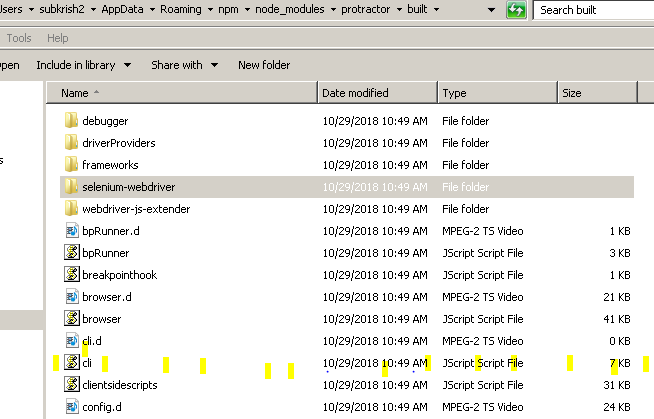
Protractor:

1. Used for testing angular applications  
   Webdriver + Angular features -> protractor
2. Protractor is a node.js program built on top of webdriver.js
3. Jasmine testing framework for protractor, is just like testing for selenium
4. To check if node.js is installed in machine  
   
5. To check if npm is installed  
   
6. Install protractor  
     
     
     
   This installs two command line tools -> protractor and webdriver-manager
7. Check version of protractor installed  
     
   checks for any updates and downloads latest updates  
   
8. By default webdriver server will start on port 4444
9. To start protractor server  
   
10. Jasmine testing framework  
    describe -> Test Suite  
    it -> test case  
    spec file -> test file  
    every spec file must have describe and it file
11. Main file of protractor is cli.js presnt in the following path:  
    
12. Javascript is asynchronous:  
    it executes instructions without waiting for the previous steps to complete
13. Promise states: pending, resolved, Rejected
14. Global Variables:  
    browser:   
    element:   
    by:   
    protractor:
15. Locators:  
      
    by.id  
    by.className  
    by.linkedText  
    by.xpath  
    by.css  
    by.name  
    by.tagName  
    by.partialLinkedText  
    by.js  
      
    by.model  
    by.binding  
    by.