Spring boot First Example with configurations.

We need to follow some steps to configure spring boot project.

Pre-Requisite:

- Jdk 1.8
- Latest eclipse
- MySQL – required in future.

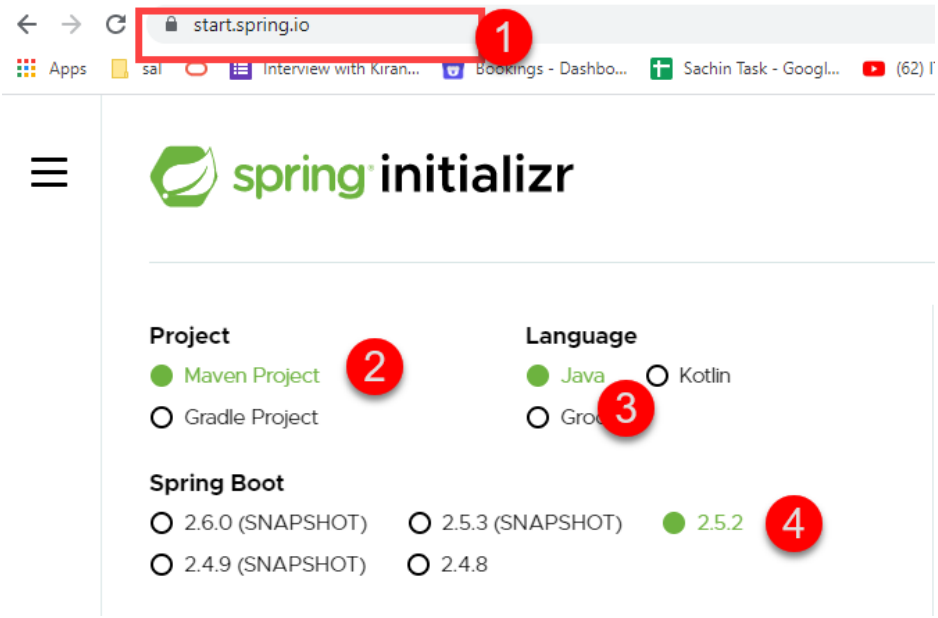
To install java and eclipse, follow this document, if you already have latest eclipse and java 8 skip this step.

https://javabykiran.in/core-java/JBKSETUP001-java-eclipse-setup.pdf

Step #1

Open website https://start.spring.io/

Select below details.

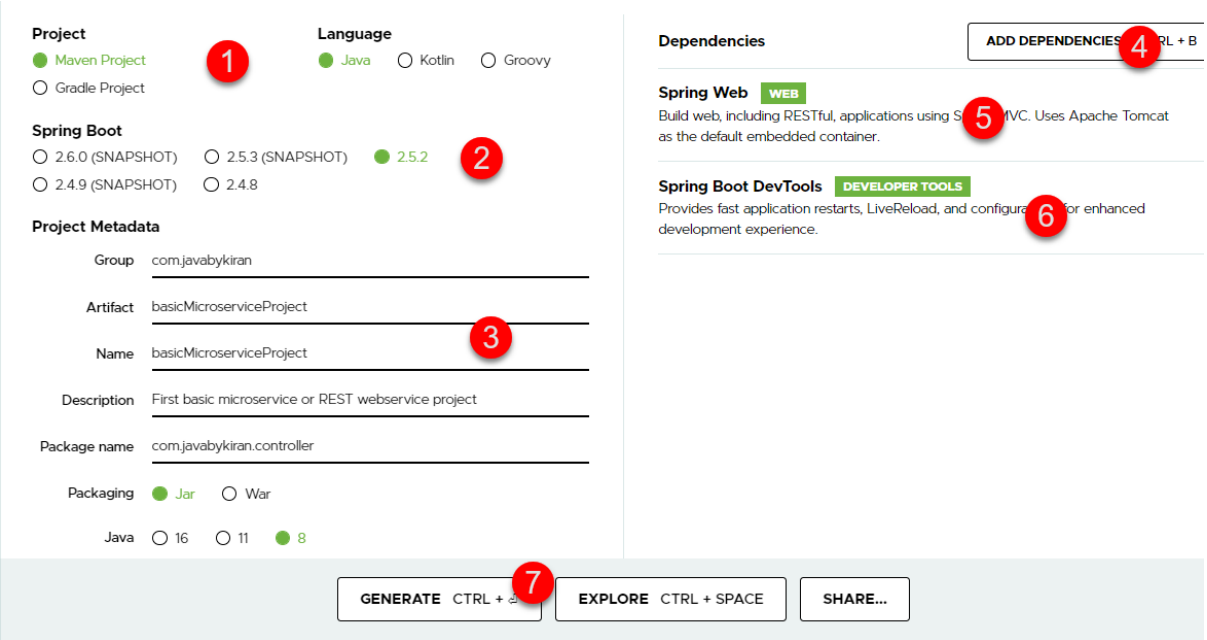


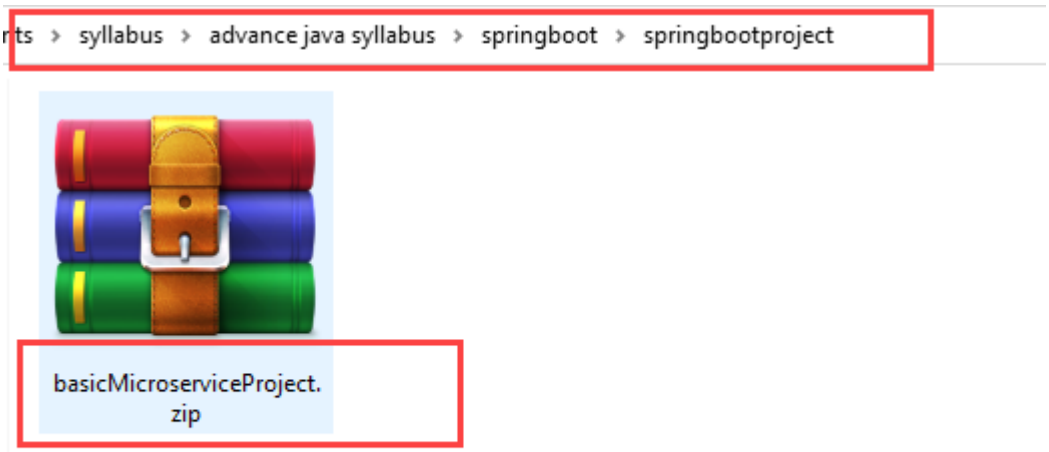
Project Metadata

- Group
  - This is a folder where all other spring boot project you want to store.
  - enter **com.javabykiran**
- Artifact
  - Your current project name.
  - enter **basicMicroserviceProject**
- Name
  - Any name
- Description
  - First basic microservice or REST webservice project
- Package name
  - com.javabykiran.controller
- Packaging
  - war: This is to create web project.
  - jar: This is to create API project.
  - select **jar.**
- Java
  - version 8 we will be using.
  - **version 8**

Click on dependencies.

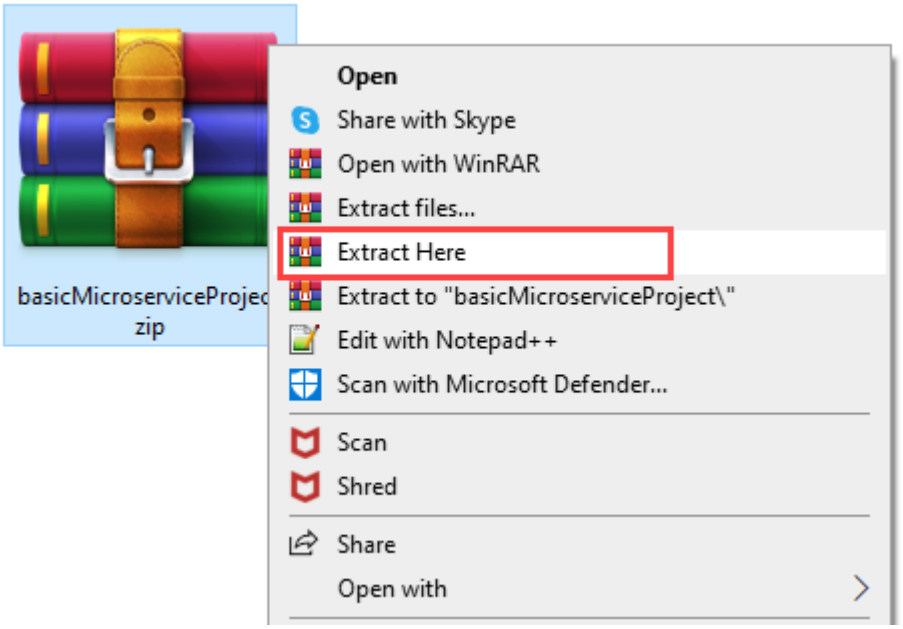
Add web , devtools





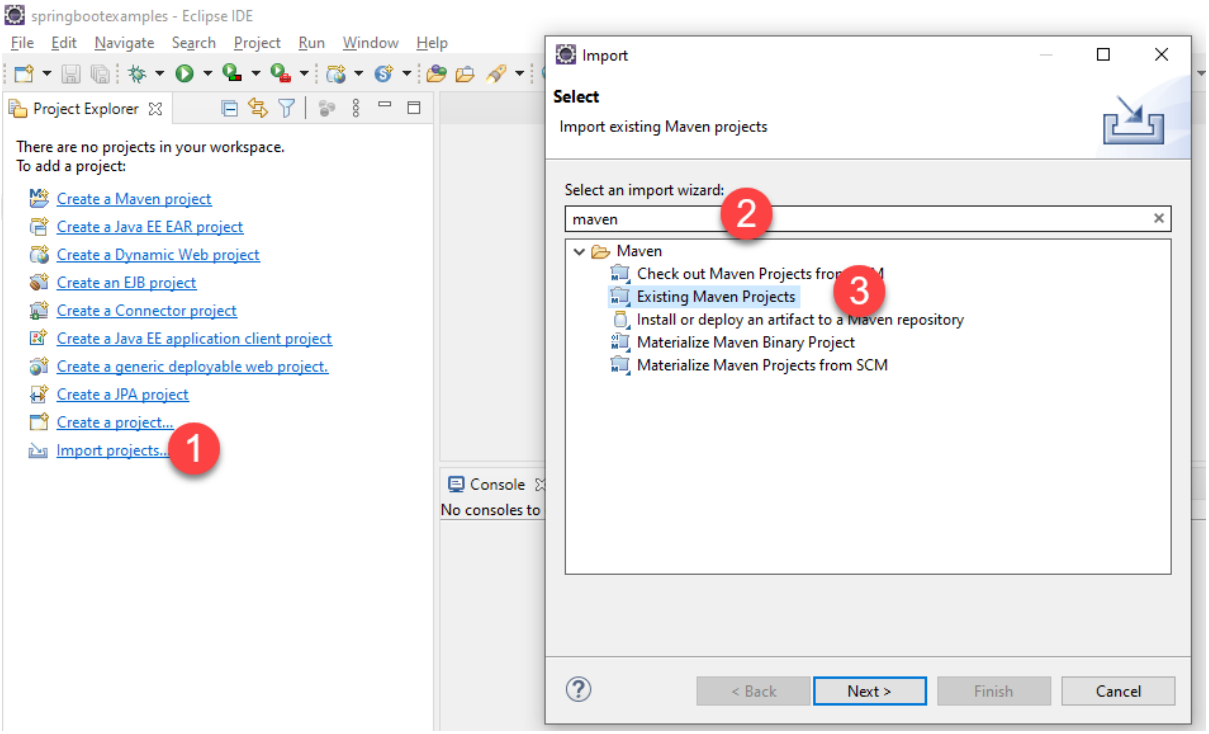
Step #2

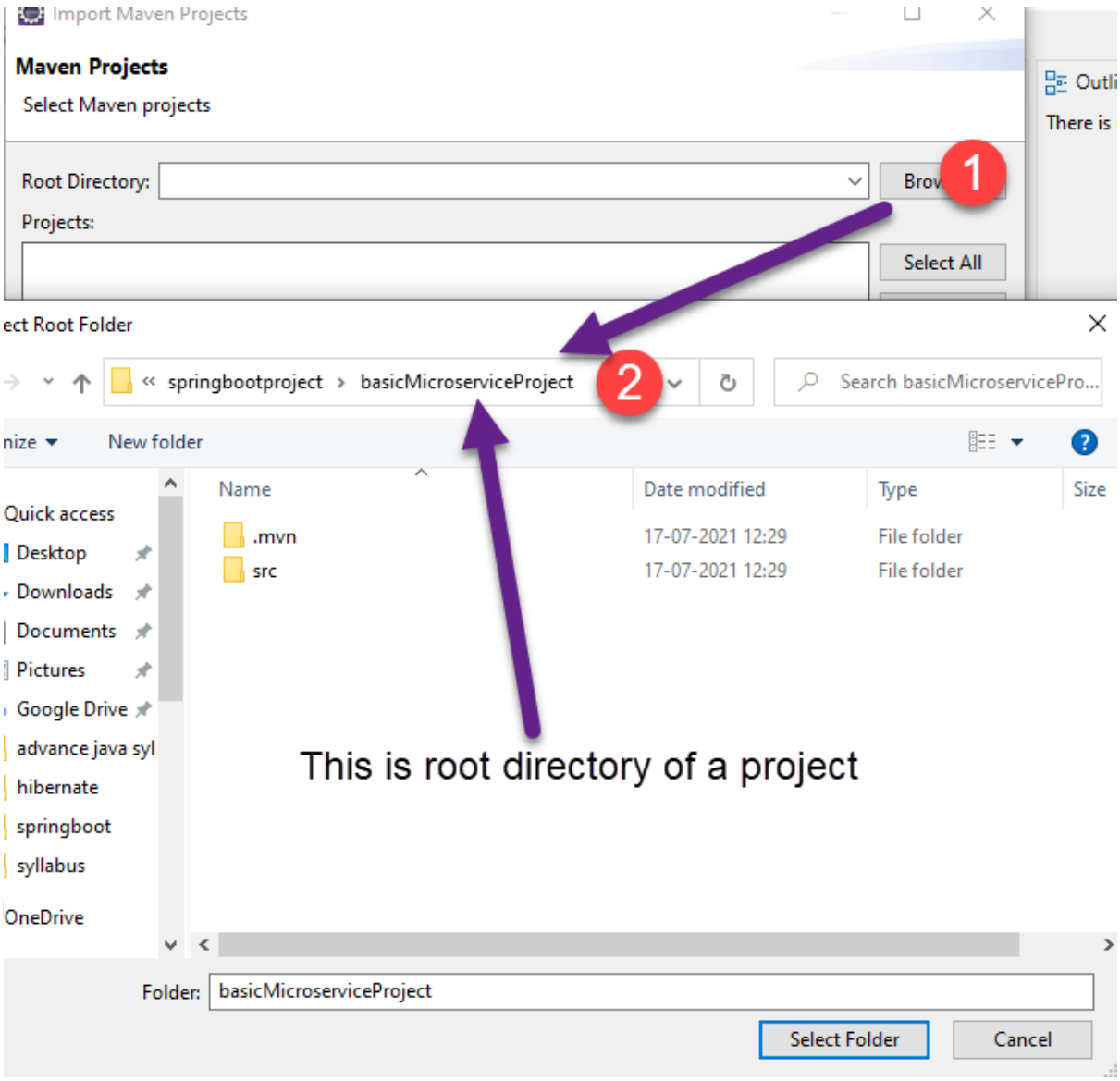
Extract project



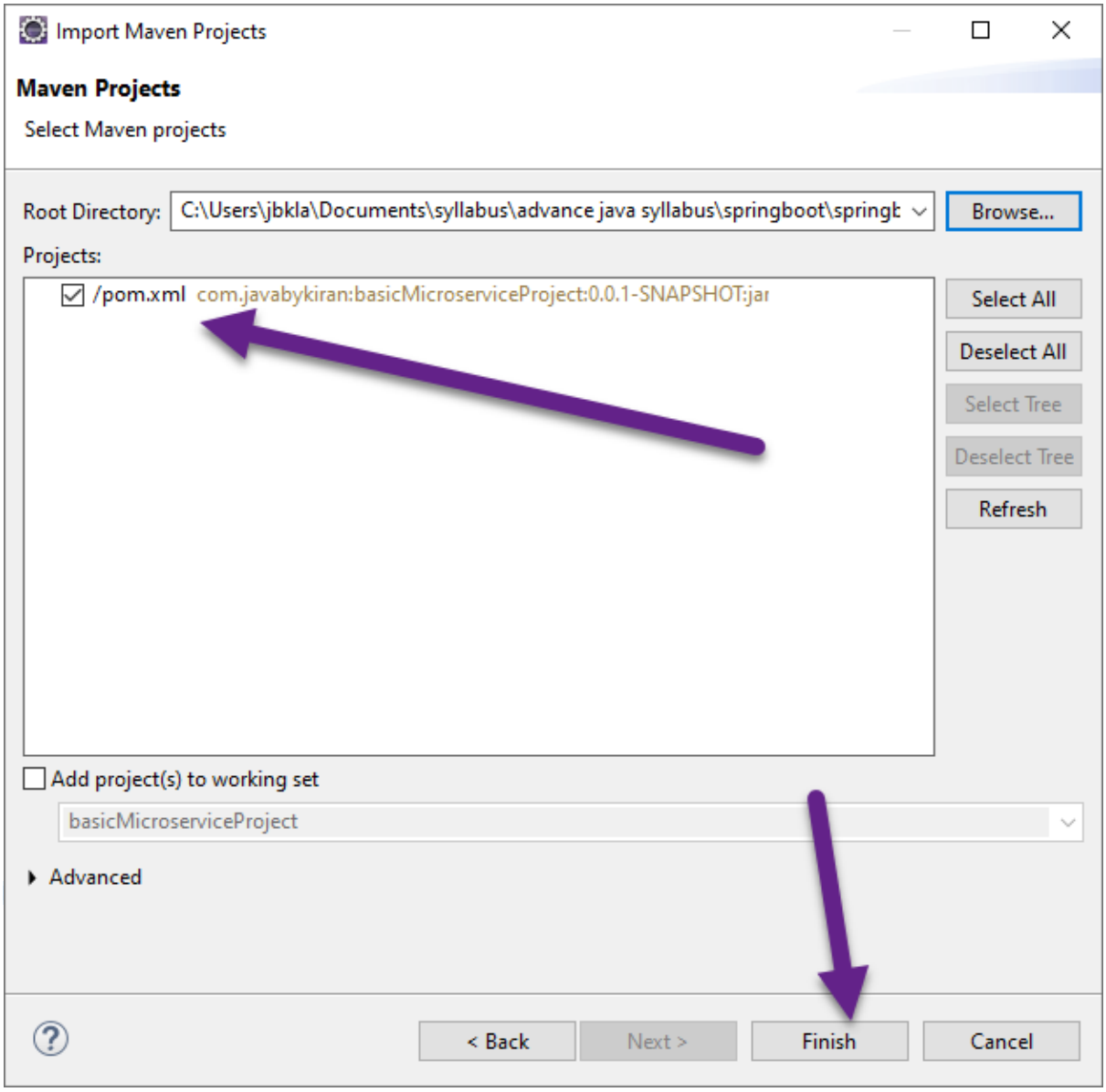
Step #3

Import project to eclipse.





Once you click on Select Folder you can see pom.xml will be imported.



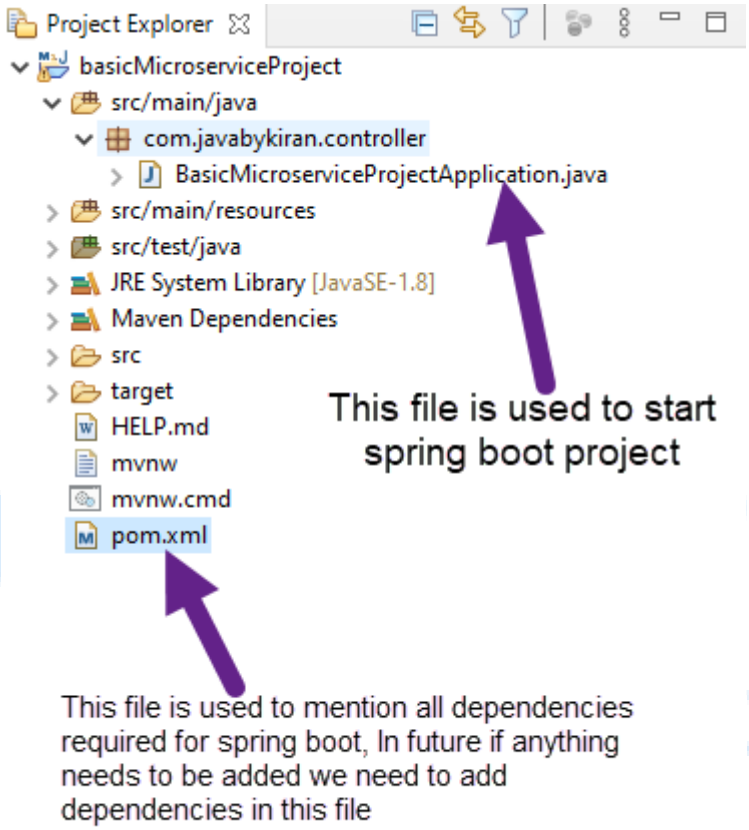
Once click on finish. Wait for dependencies to get downloaded in our project. It may take few minutes depending upon your internet speed.

Below is project structure after downloading all dependencies. Make sure you do not have any errors in problem windows. Most of the errors occur if we do not have proper version of java or maven or eclipse.

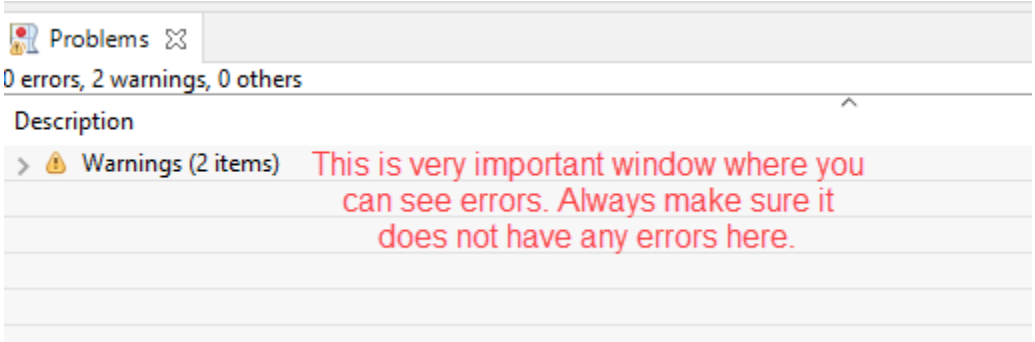
Open problem window – window – show view - problems.

Step #4

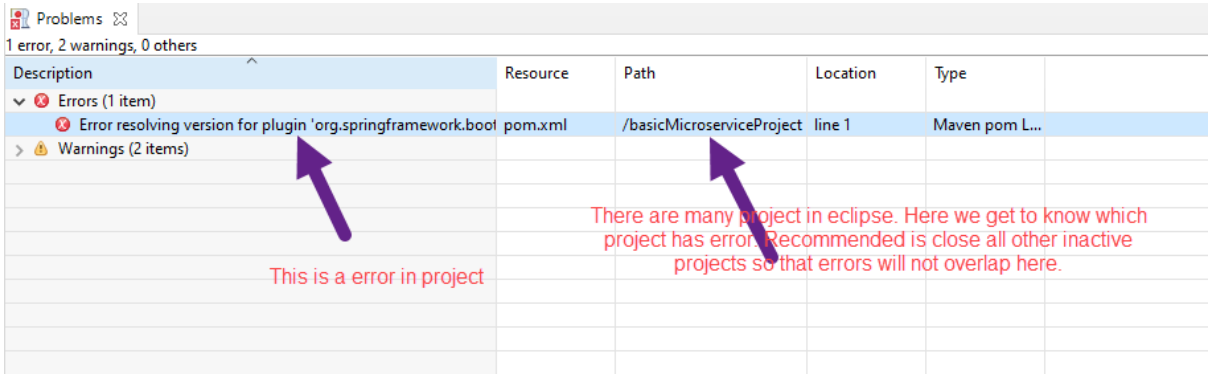
Check if out setup is correct.



This is important window as below. For everything you do in eclipse always keep this window open for seeing any errors.

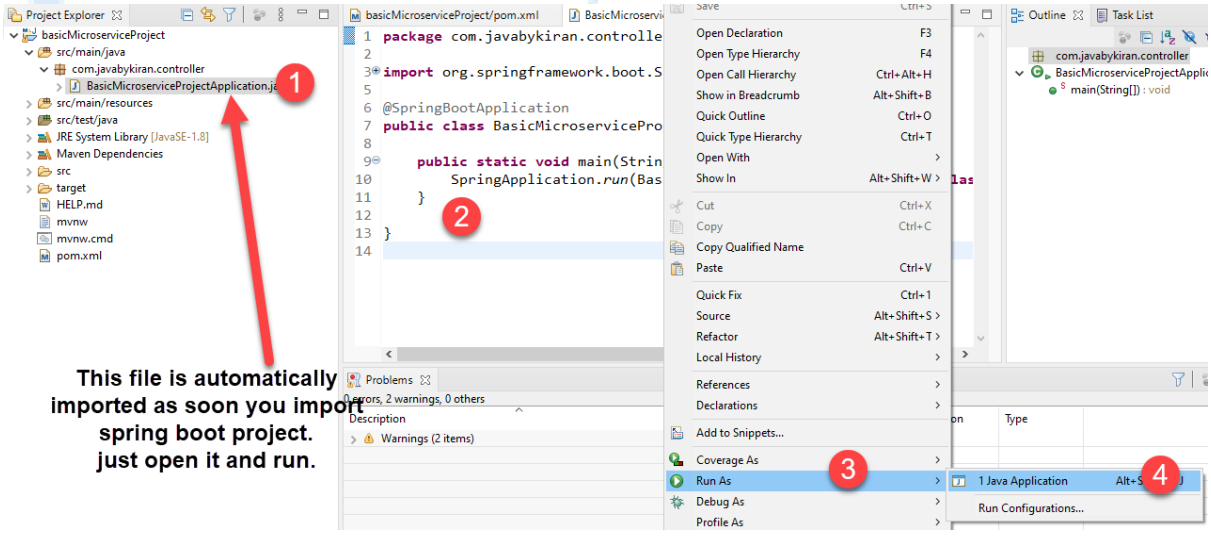


Just for time being we will see how errors will look like.

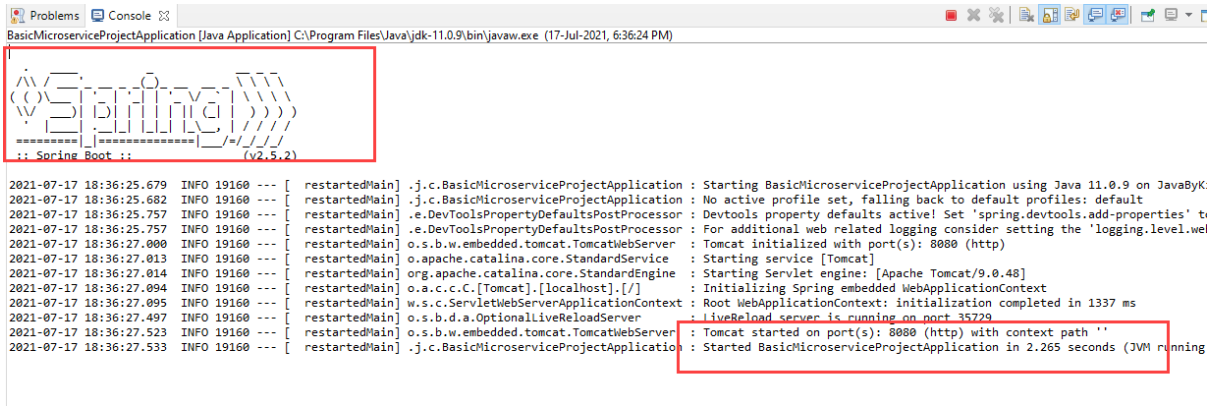


Step #5

It's time to check if our spring boot project is running correctly.



After running this console should have below output.



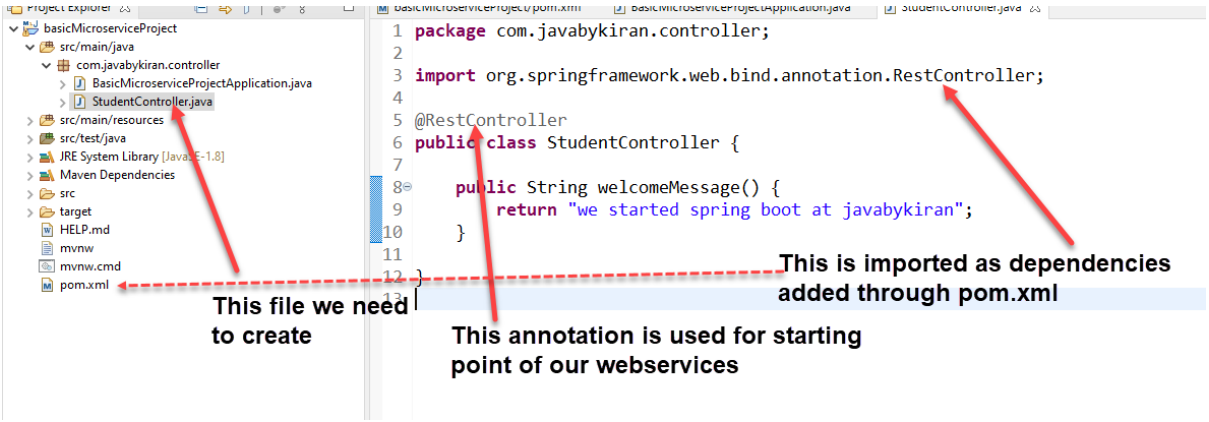
Now it is time to write simple first webservice.

Step #6

1. Create controller class.
   a. This is a class which will be hit by client first.
   b. This class takes a request and send response back to client.
      i. Response can be json or xml format.
      ii. Our focus will be on json format.
2. Use all annotations required for rest API.
   a. @Restcontroller
      i. This annotation is used at class level.
      ii. This is mandatory if we want to create rest webservice.
   b. @Requestmapping
      i. @getMapping
      ii. @postMapping
      iii. @putMapping
      iv. etc.

Step #7

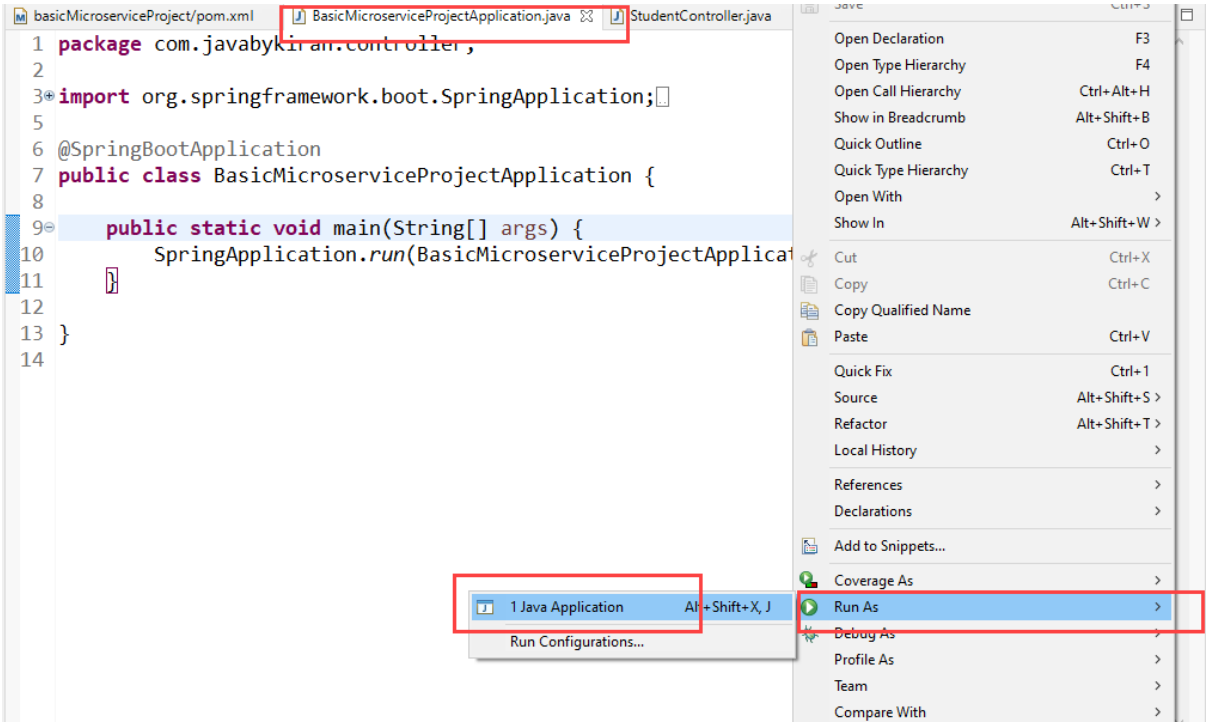
Create CustomerController.java as below.



We have not yet added endpoint for our service. So add at method level @RequestMapping annotation

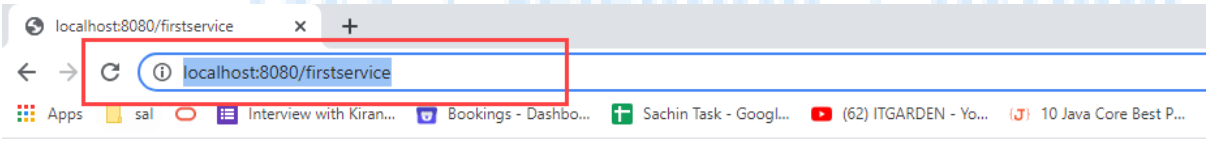
Go to browser. This is simple service we have created we need to run this service.

First start a project from main method.



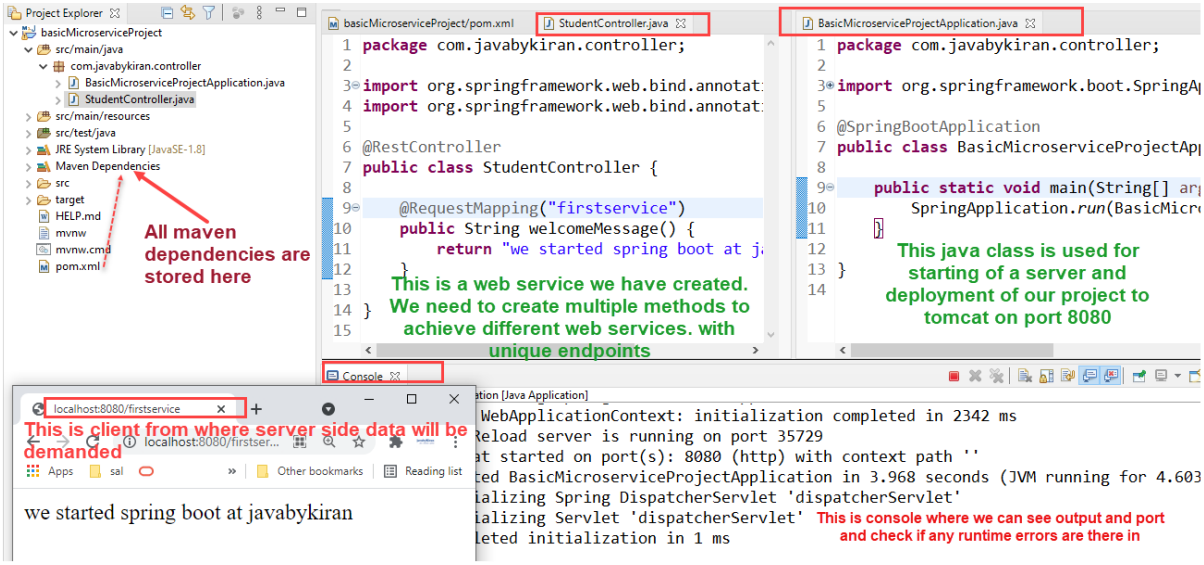
Check console if you see any exceptions if not go to browser.

In address bar hit url http://localhost:8080/firstservice



we started spring boot at javabykiran

Summary



Homework:

Read tutorial from below link to know in depth of spring boot. Screens used might be different than this, but concept is same.

https://www.jbktutorials.com/spring-boot/introduction-to-spring-boot.php#gsc.tab=0