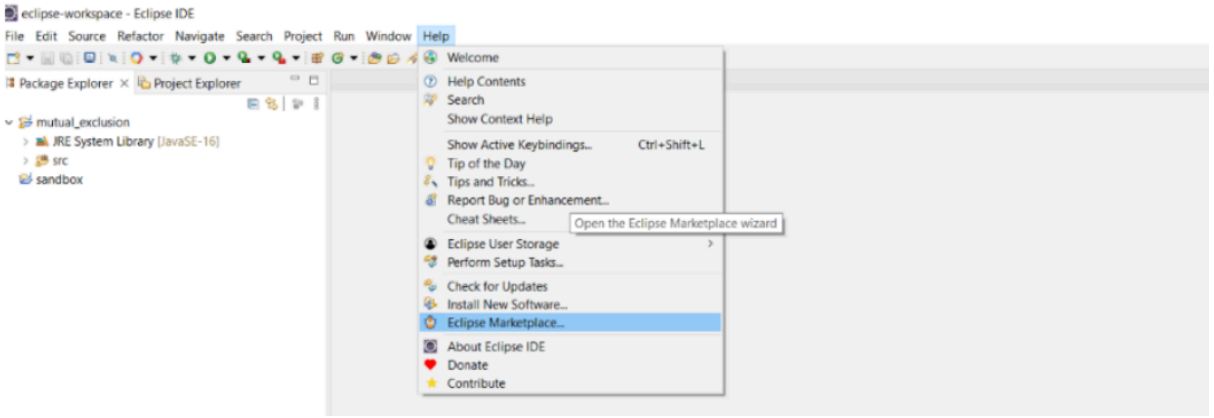
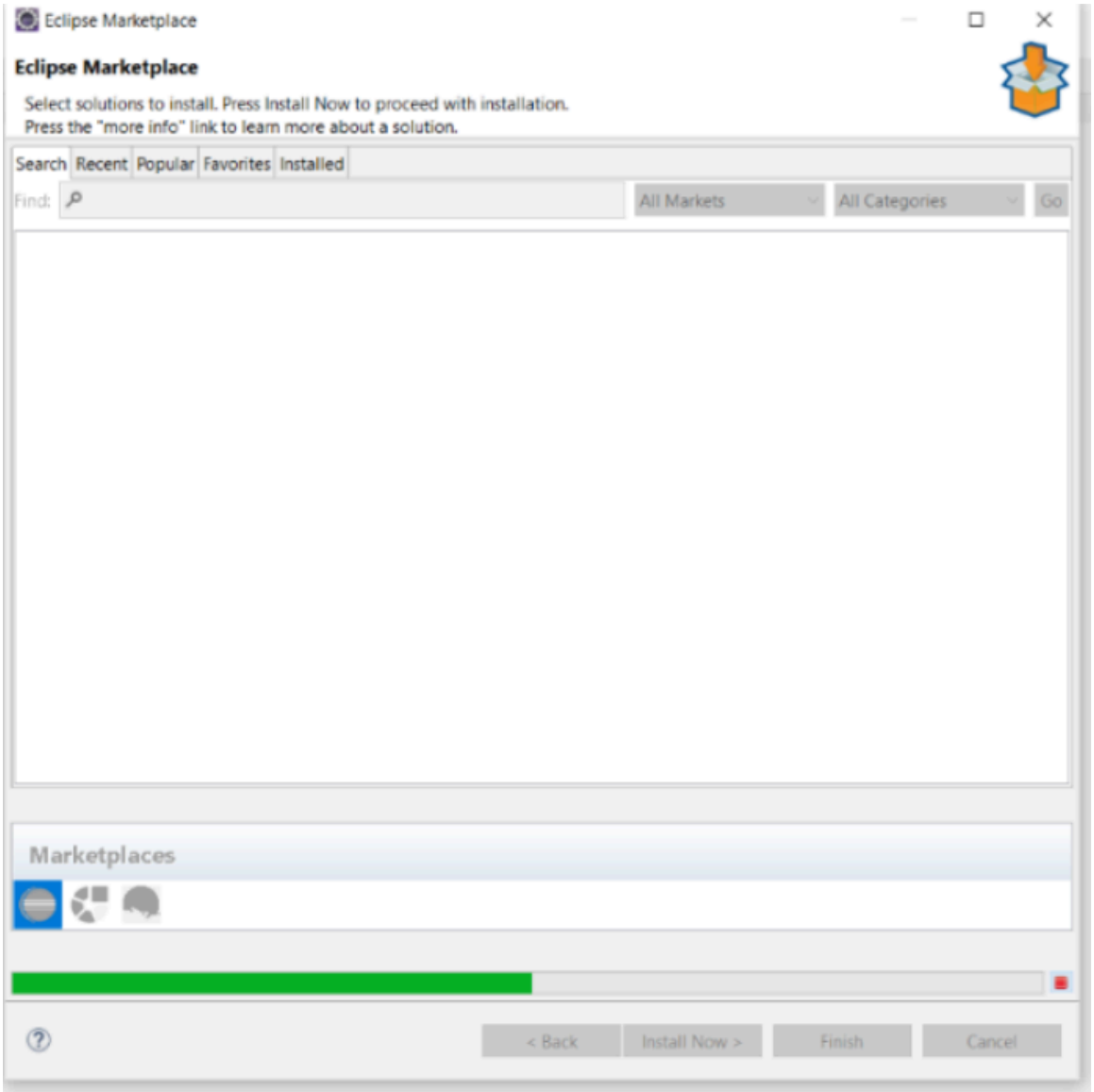
Practical No: - 8.2

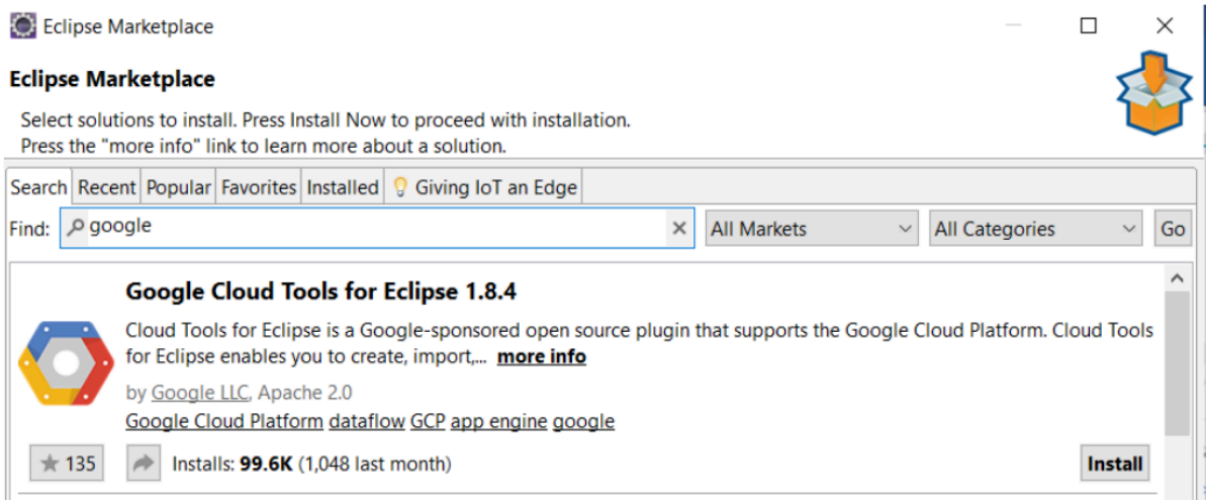
Write a Program to developed an Application using Google App Engine by using Eclipse IDE

Step 1: - Click on Help. Eclipse Marketplace

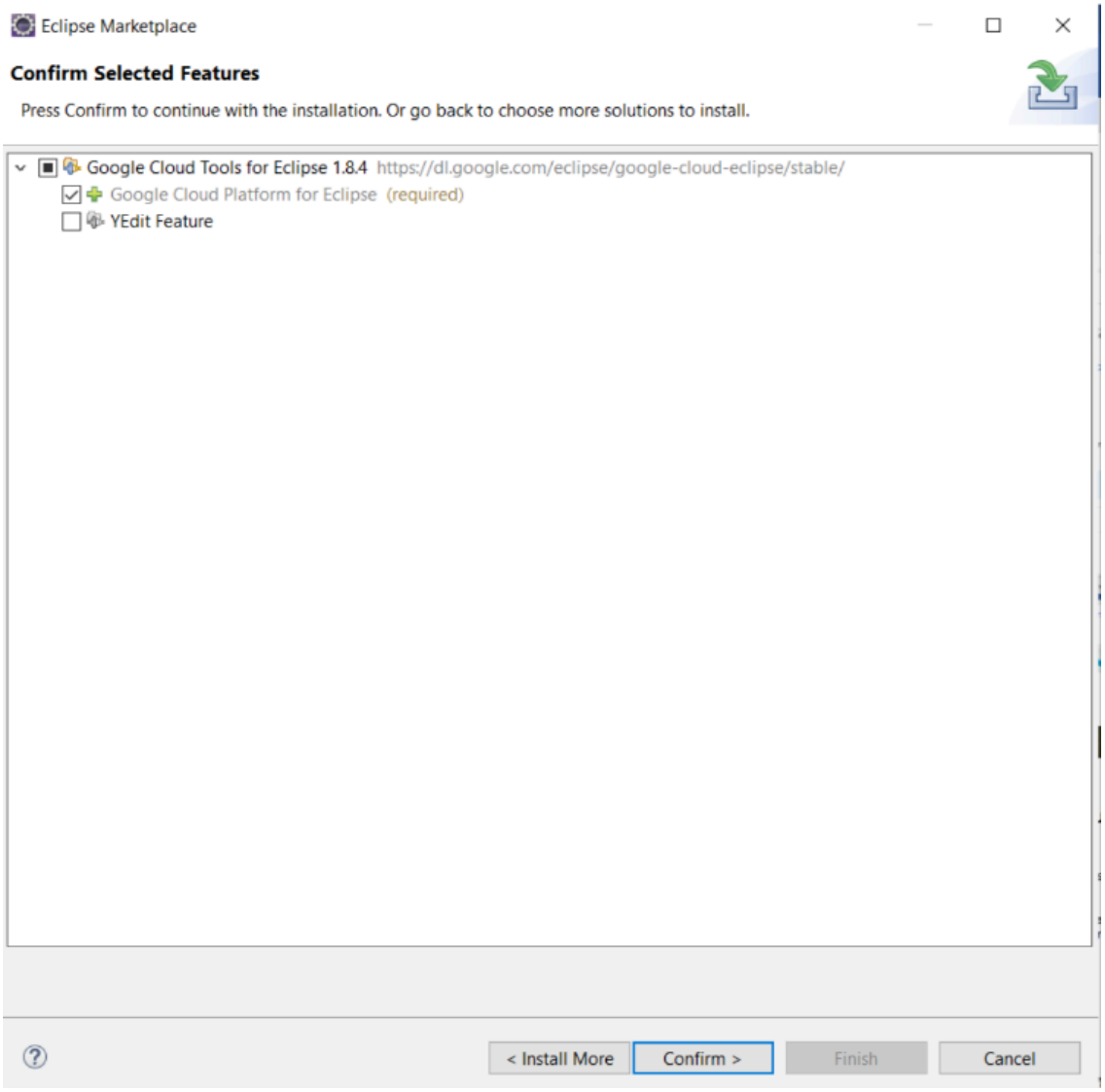


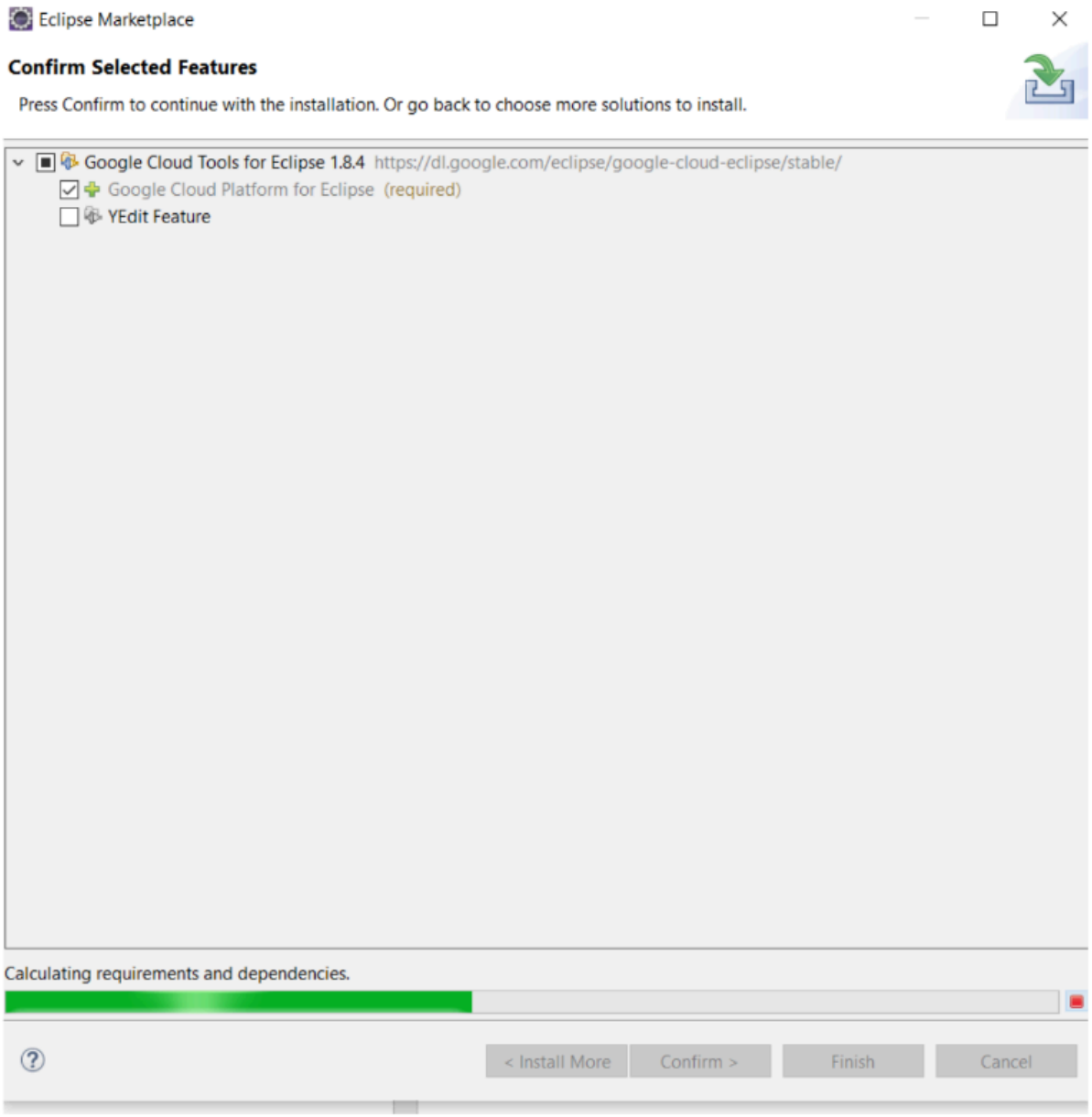


Step 2: - Once the Eclipse Marketplace window appear in search textbox write “google” click on enter

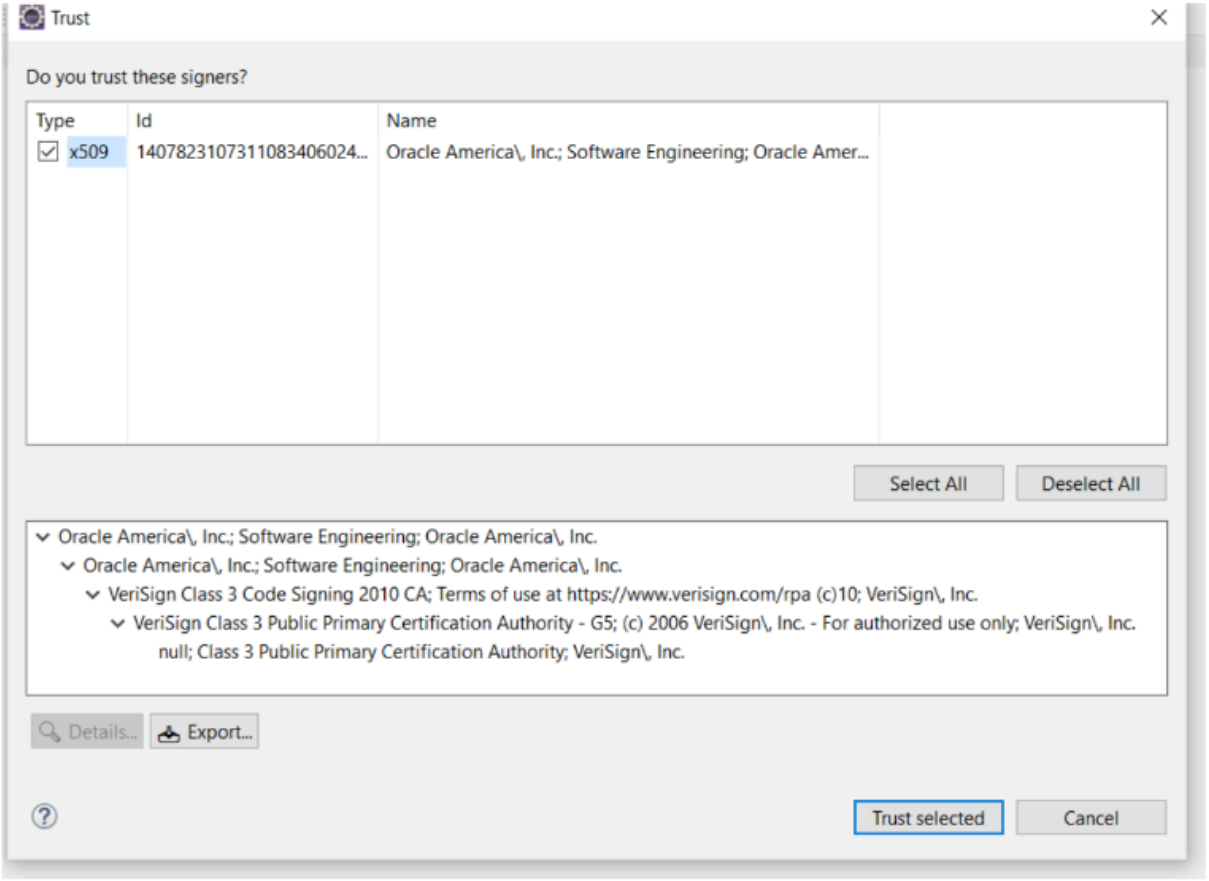


Step 3: - Click on confirm

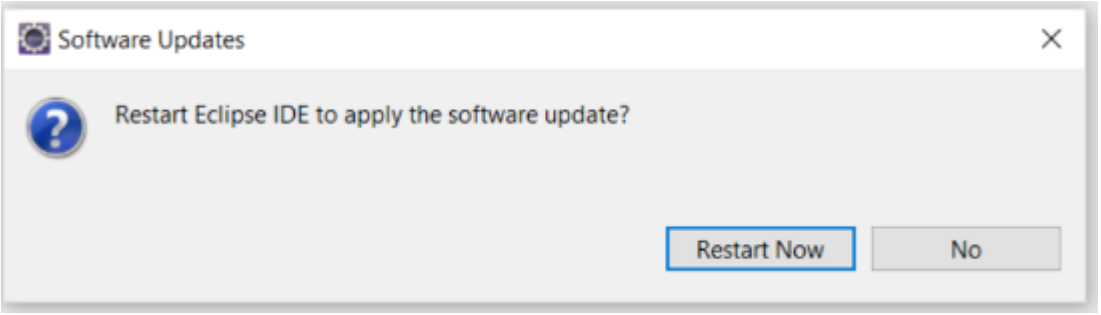



Eclipse Marketplace
Confirm Selected Features
Press Confirm to continue with the installation. Or go back to choose more solutions to install.
Google Cloud Tools for Eclipse 1.8.4 https://dl.google.com/eclipse/google-cloud-eclipse/stable/
Google Cloud Platform for Eclipse (required)
YEdit Feature
Calculating requirements and dependencies.
< Install More
Confirm >
Finish
Cancel

Step 4: - Once the below window appear click on trust selected

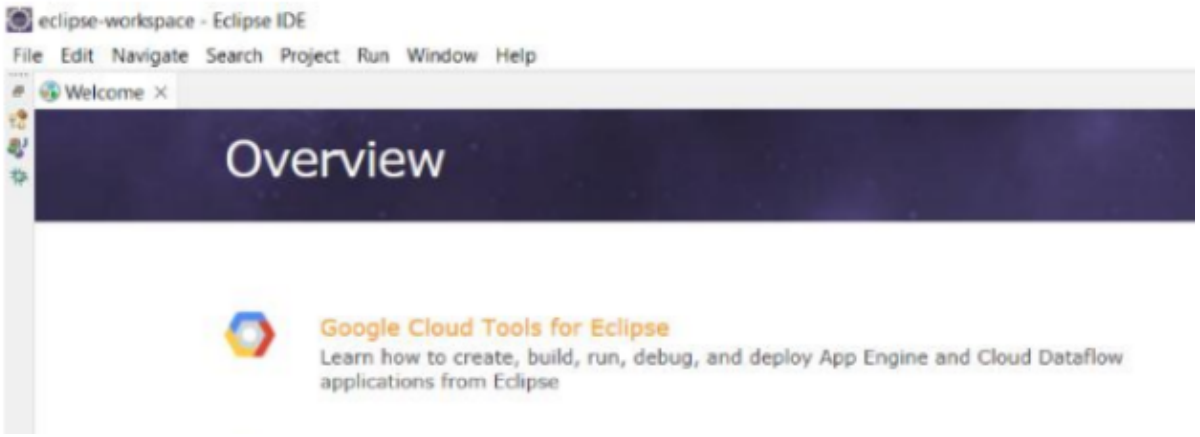


Step 5: - Click on restart now

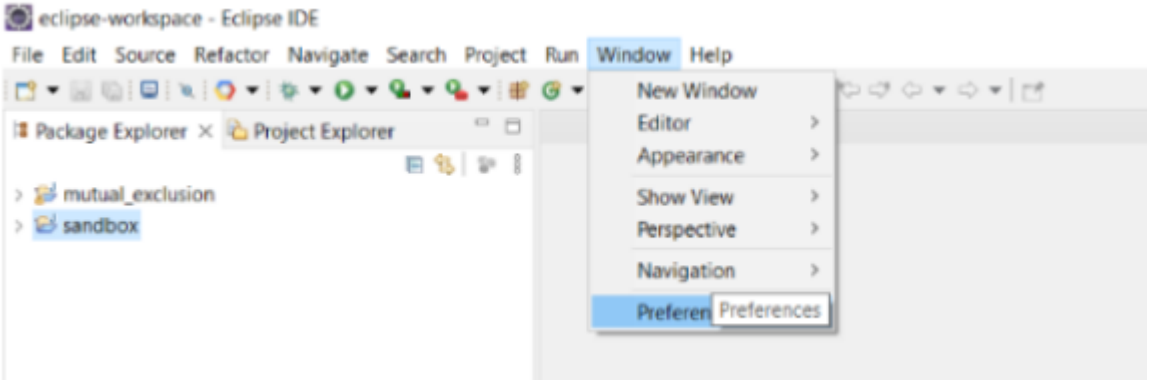


Step 6: - Below window will appear

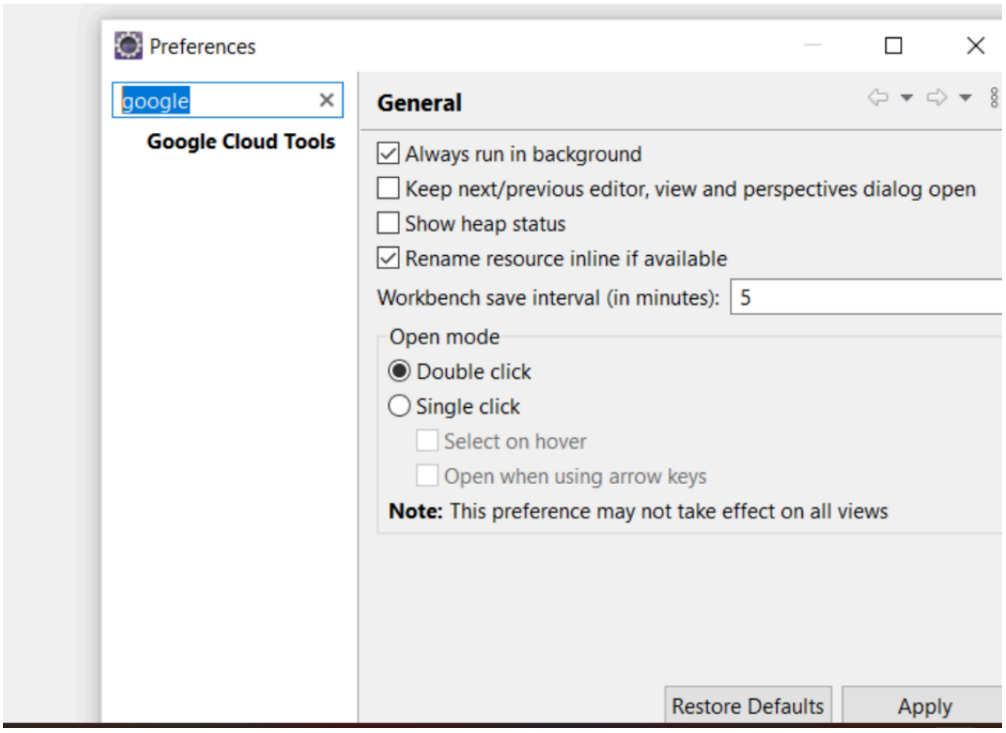
Step 7: - Below window will appear close the welcome page



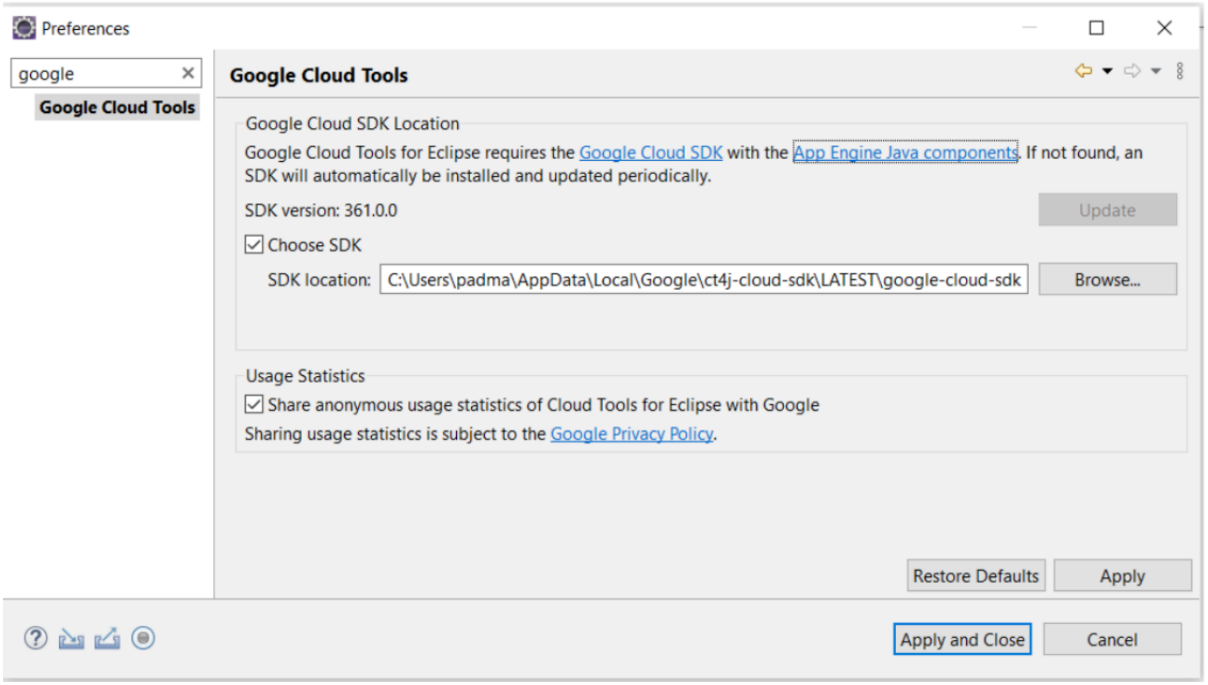
Step 8: - Once the eclipse window appear, click on Window -> Preferences



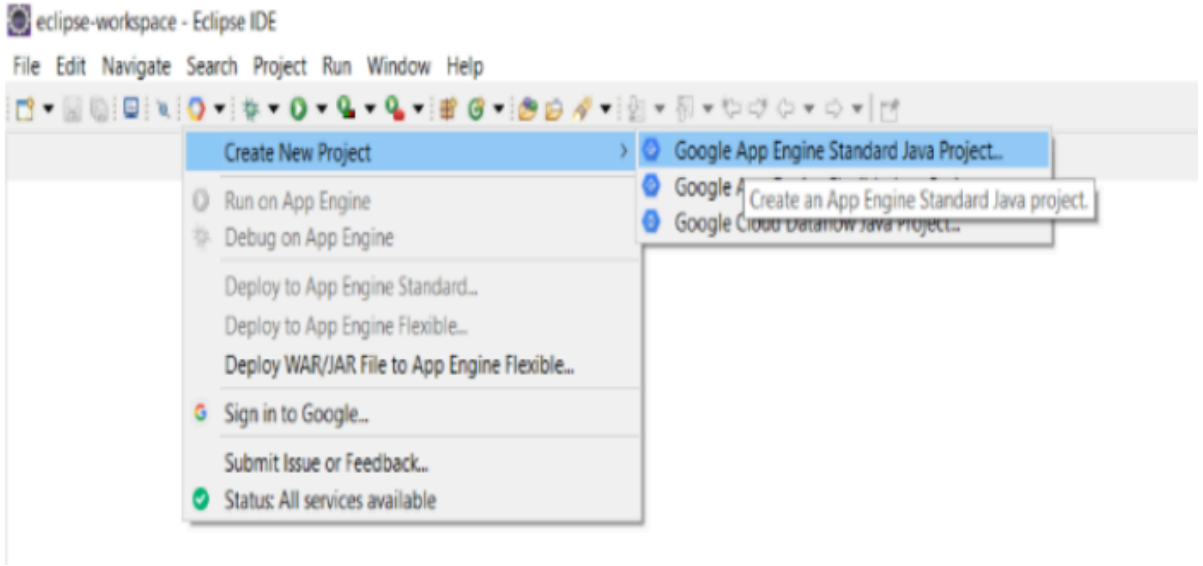
Step 9: - Below Preferences window will appear, search for google



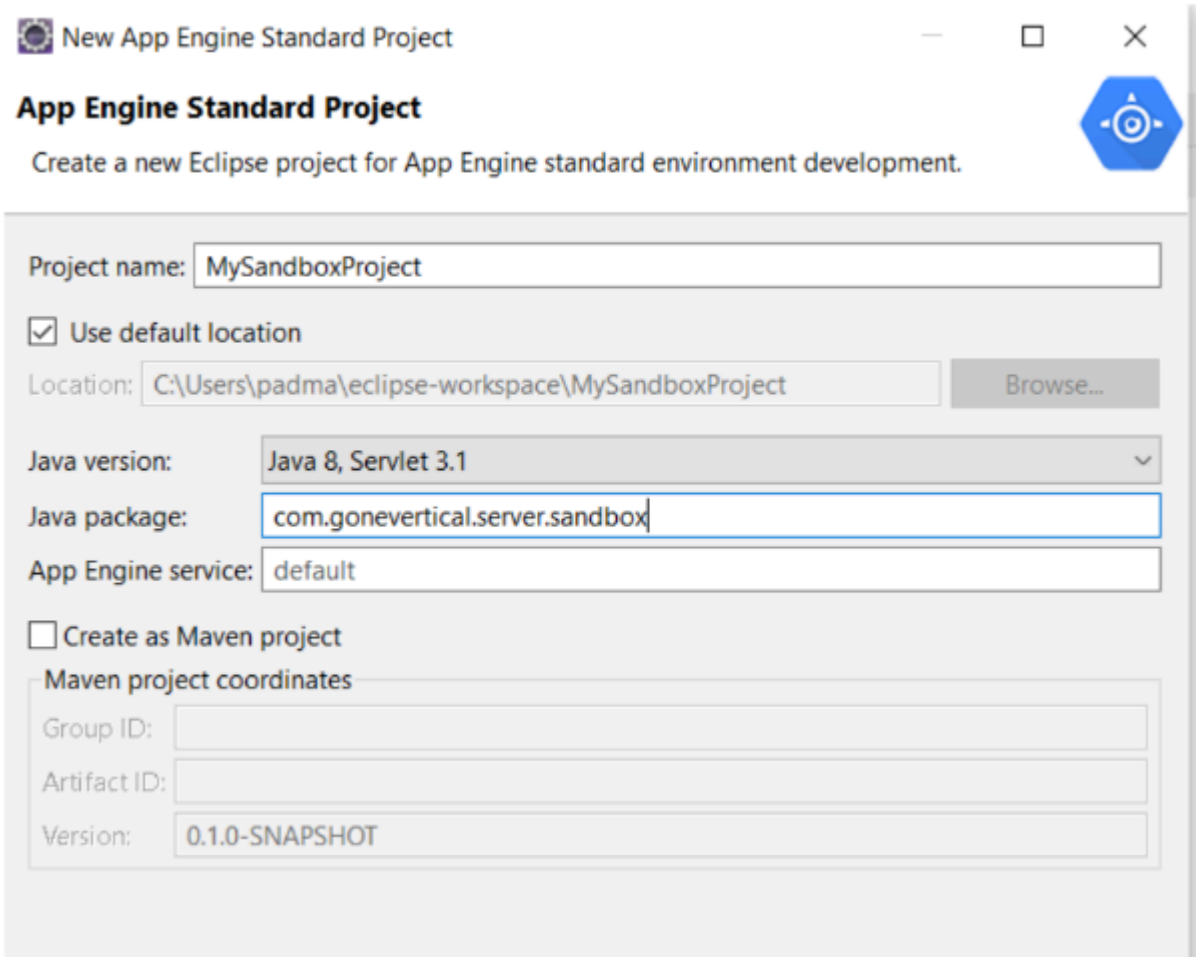
Step 10: - Click for App Engine Java Components and click on Apply and Close



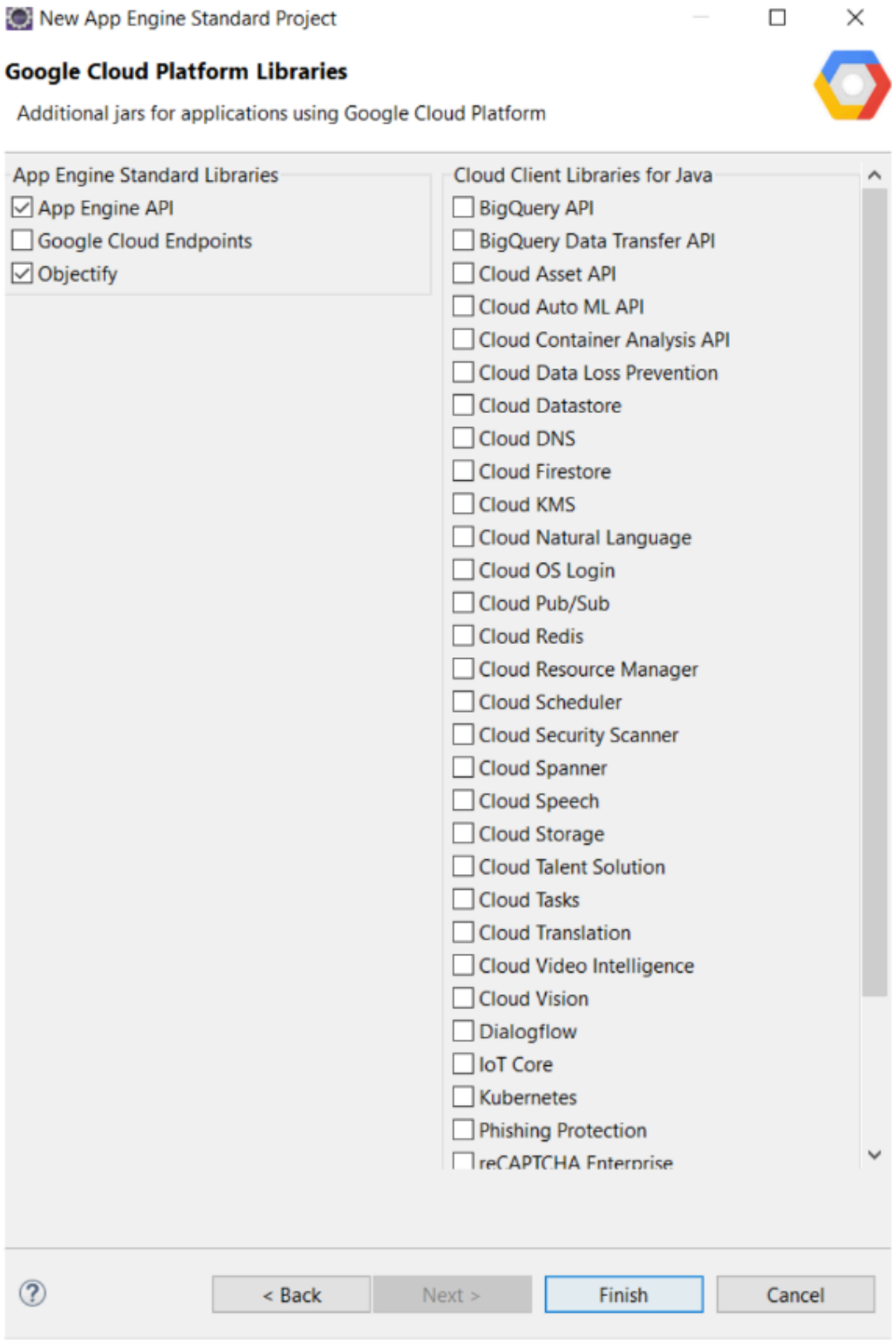
Step 11: - Now create a "Google App Engine Standard Java Project"



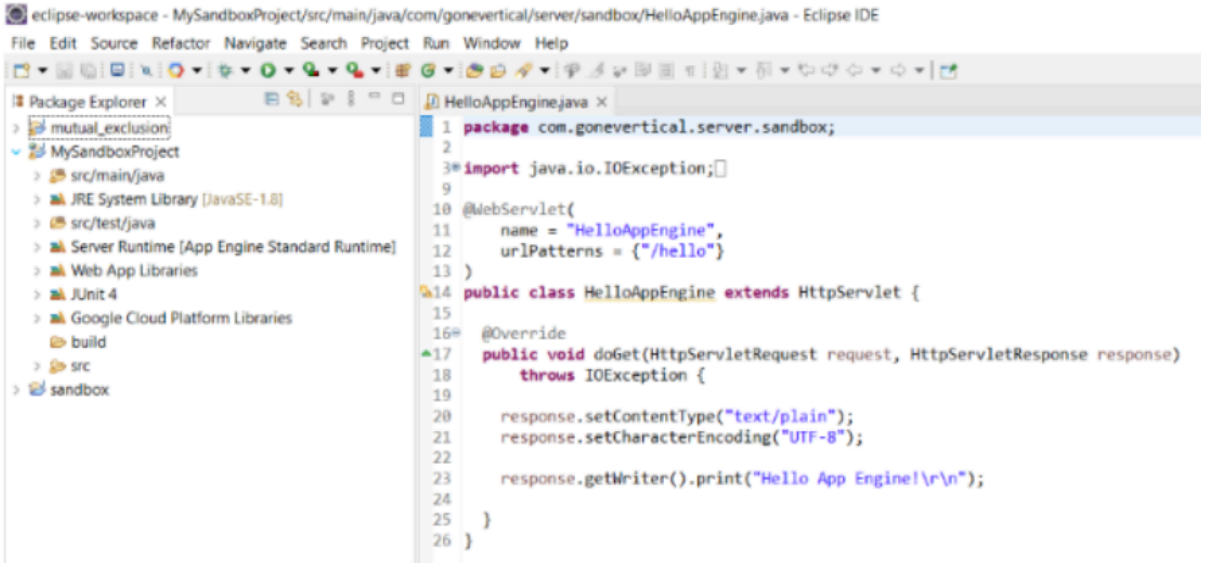
Step 12: - Below screen will appear New App Engine Standard Project. Provide the Project Name & Java Package as mentioned below:
Project Name: My SandboxProject
Java Package: com.gonevertical.server.sandbox
Click on Next


New App Engine Standard Project
App Engine Standard Project
Create a new Eclipse project for App Engine standard environment development.
Project name: MySandboxProject
Use default location
Location: C:\Users\padma\eclipse-workspace\MySandboxProject
Browse...
Java version: Java 8, Servlet 3.1
Java package: com.gonevertical.server.sandbox
App Engine service: default
Create as Maven project
Maven project coordinates
Group ID:
Artifact ID:
Version: 0.1.0-SNAPSHOT

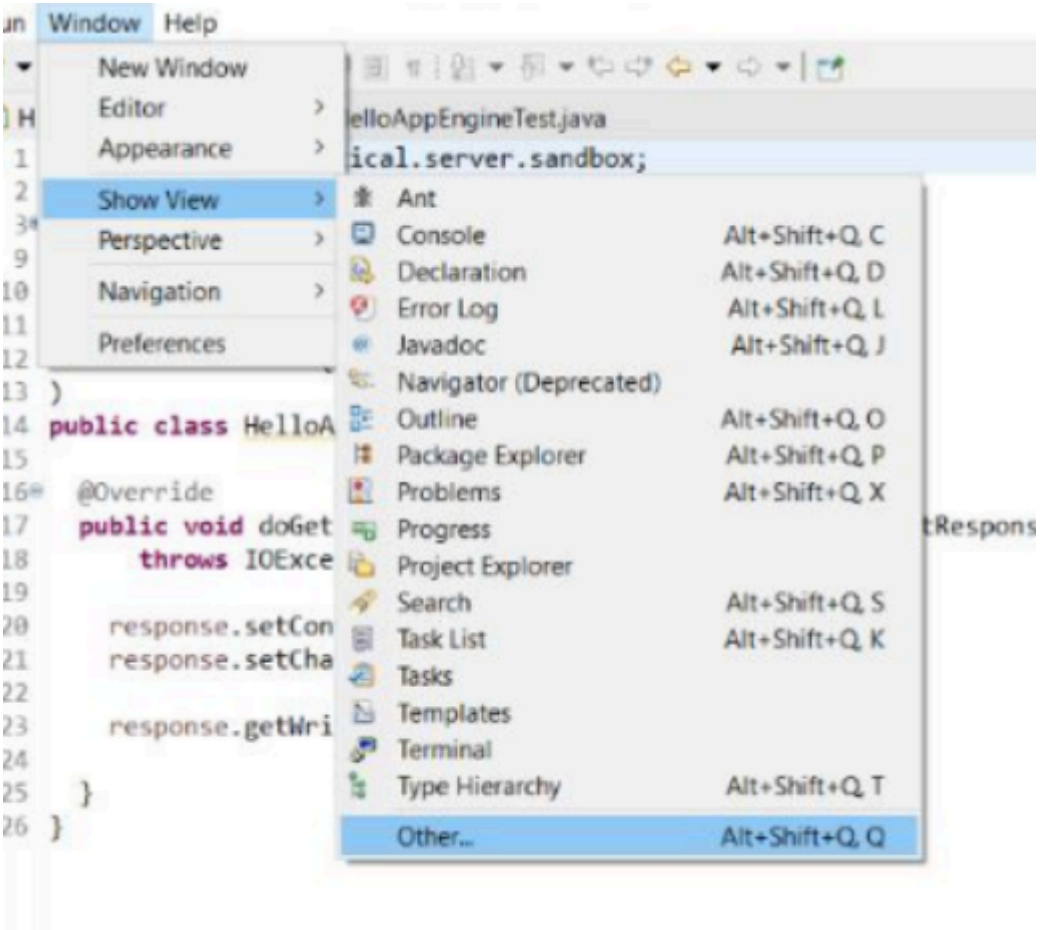
Step 13: - Below screen will appear. From App Engine Standard Libraries Select 1.App Engine API 2.Objectify
Click on Finish



Step 14: - Below Screen will Appear “HelloAppEngine.java”

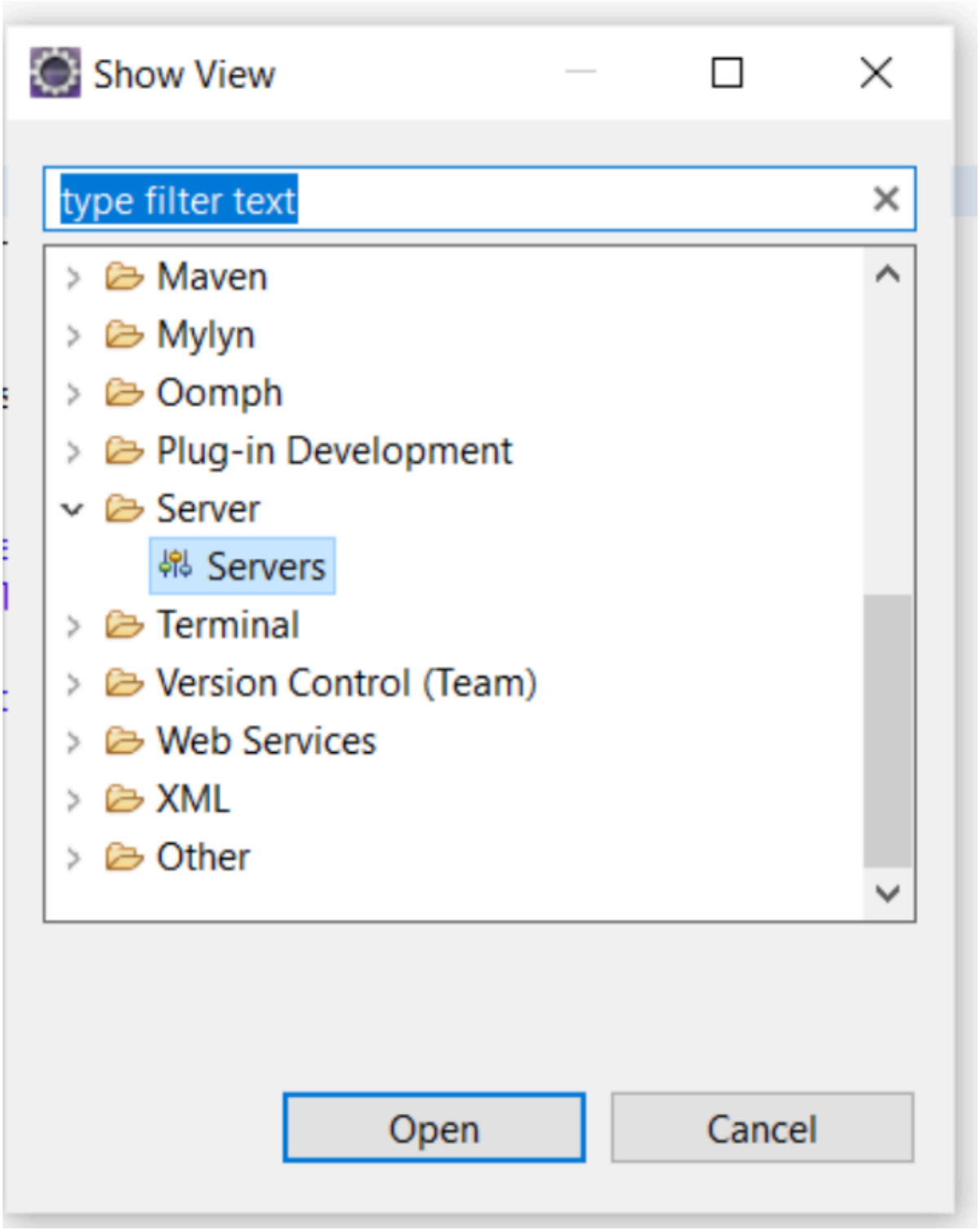


Step 15: - Go to Window->Show View->Other

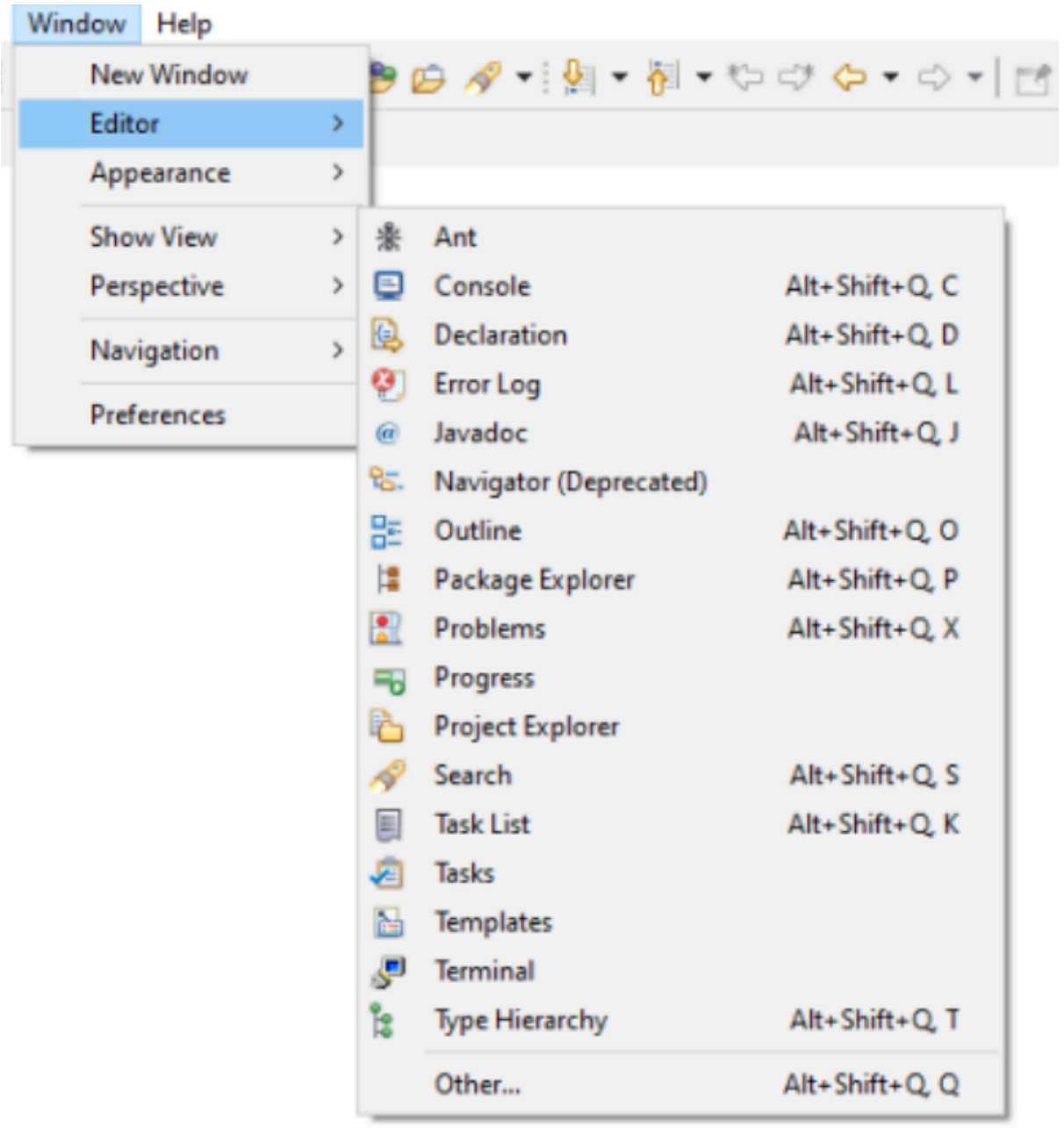


Step 16: - After clicking on other below Screen of Show View will appear

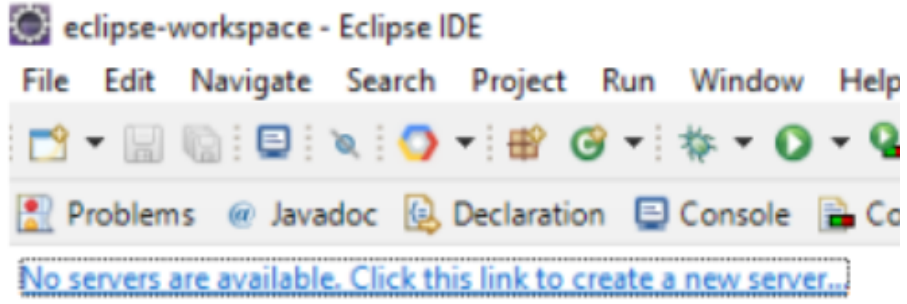
1. Click on Server->Servers
2. Click on Open



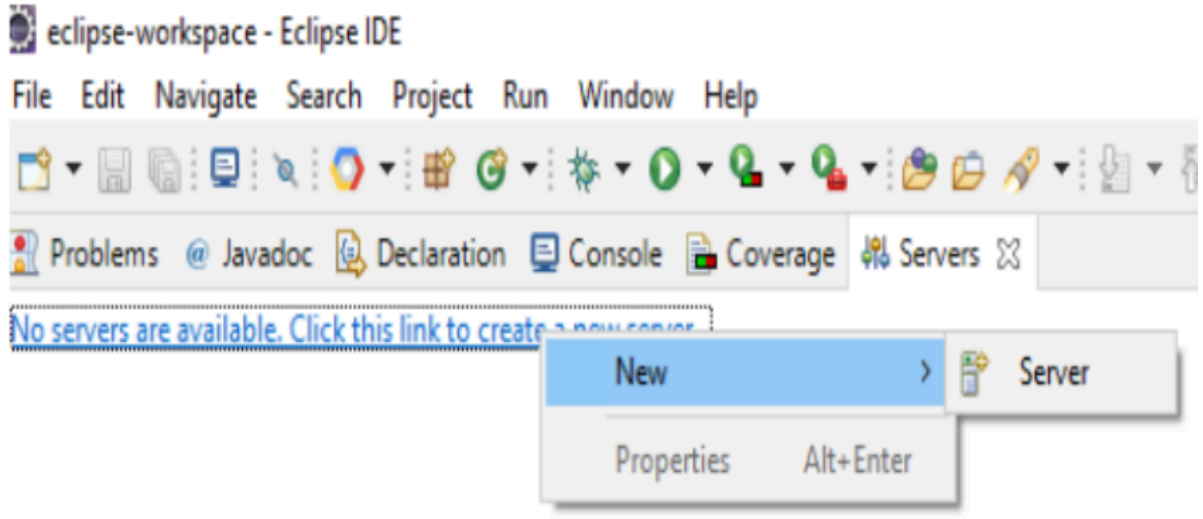
Step 17: - Click on Window->Editor->Console



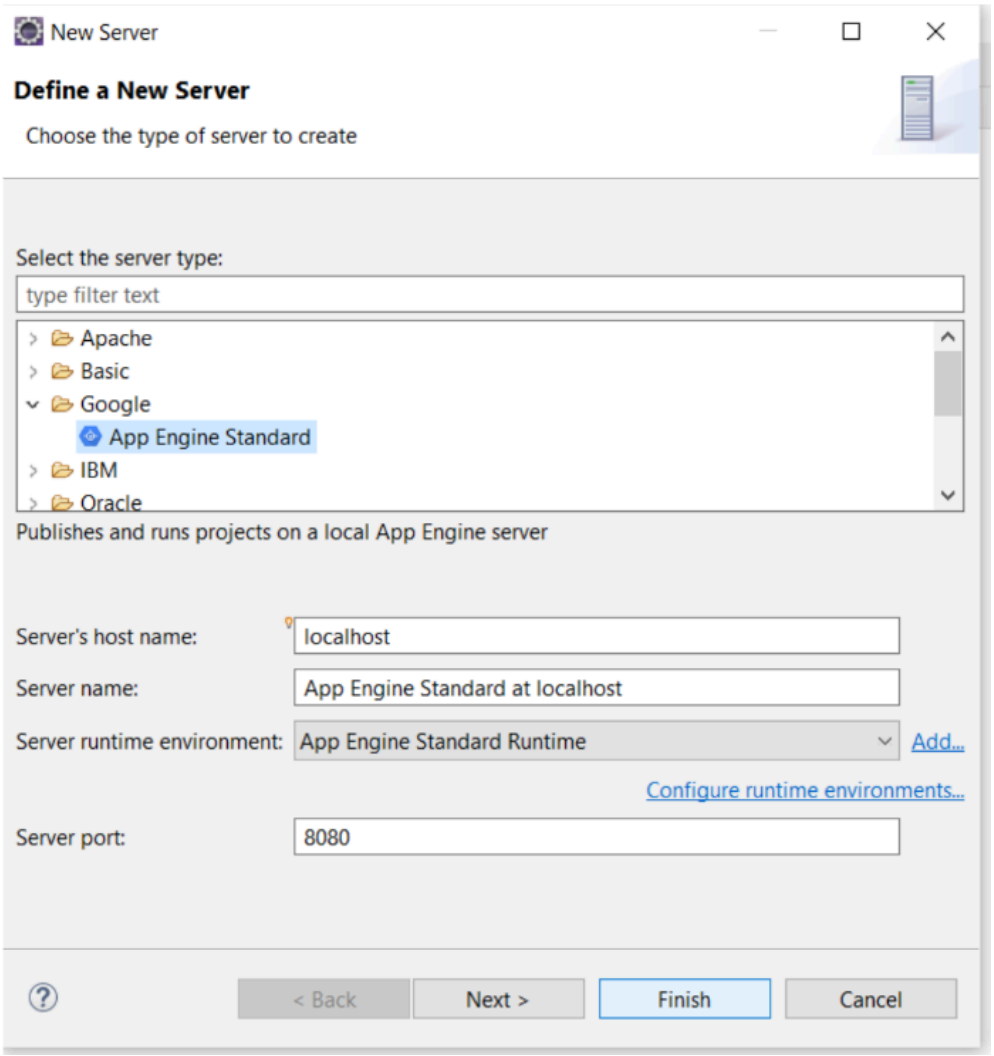
Step 18: - Once the Console screen appear ->Click on Servers



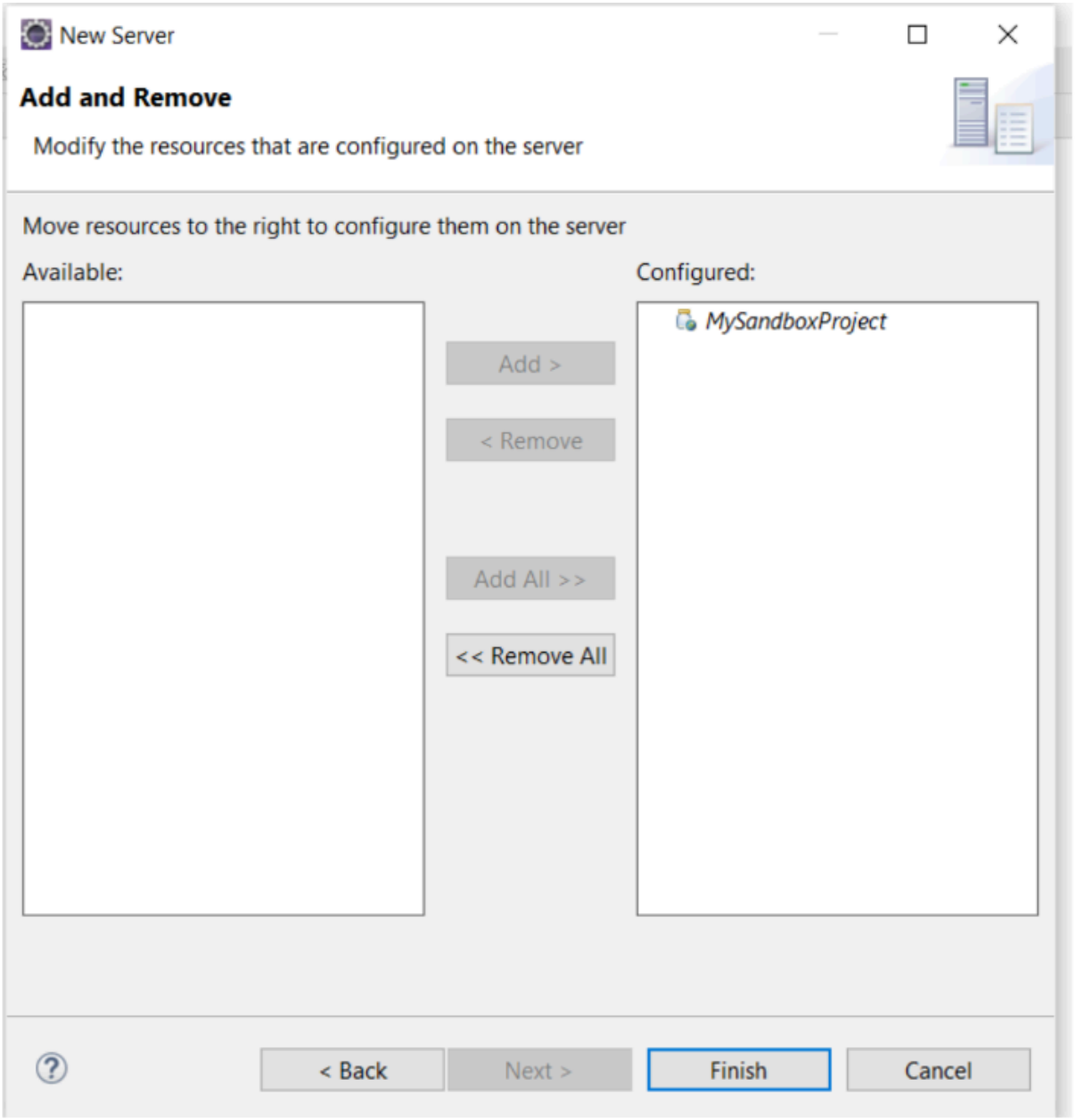
Step 19: - Right click on server ->New->Server

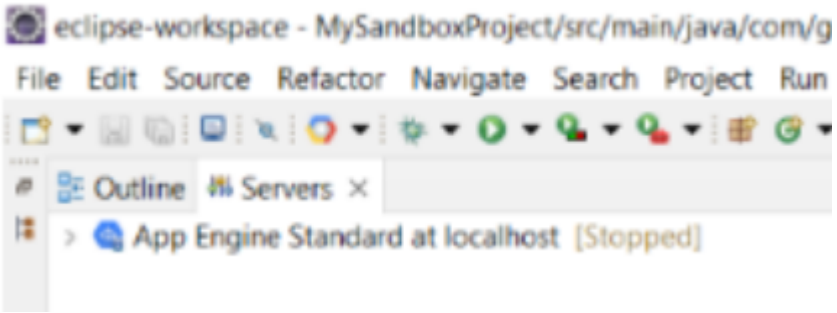


Step 20: - To define a new server will below screen appear 1. Select App Engine Standard 2.Click on Next 3.Click on Finish

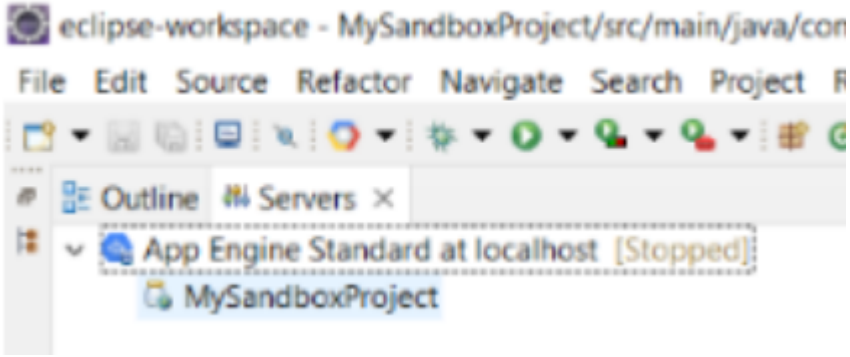


Step 21: - Select from Available Project: MySandboxProject and then click on Add Button. Click on Finish Button





Step 22: - Click On App Engine Standard At localhost ->MySandboxProject

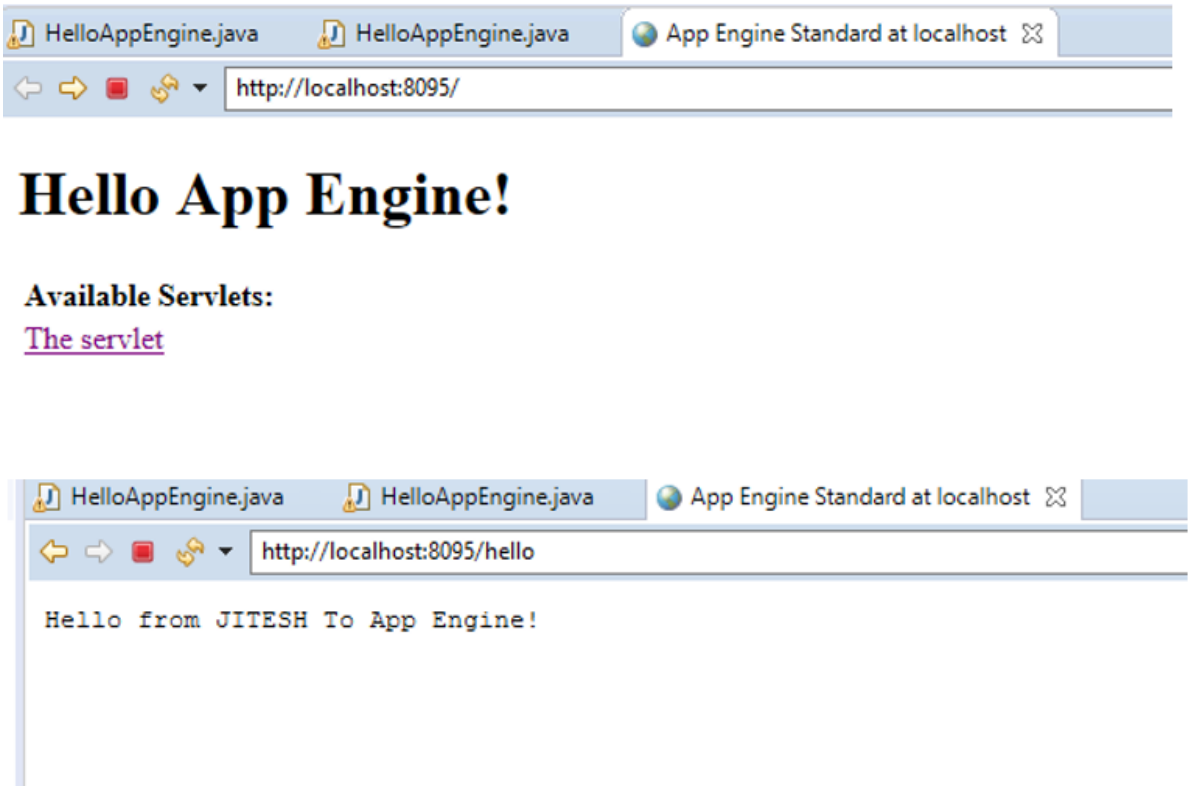


Step 23: - Execute the following code, Right click on App Engine Standard At localhost->Click on Debug

Code: -

```
import java.io.IOException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet(
  name = "HelloAppEngine!",
  urlPatterns = {"/hello"}
)
public class HelloAppEngine extends HttpServlet {
 @Override
 public void doGet(HttpServletRequest request, HttpServletResponse response)
   throws IOException {
  response.setContentType("text/plain");
  response.setCharacterEncoding("UTF-8");
  response.getWriter().print("Hello from JITESH To App Engine!\r\n");
 }
}
```

Output: -


HelloAppEngine.java
HelloAppEngine.java
App Engine Standard at localhost
http://localhost:8095/
Hello App Engine!
Available Servlets:
The servlet
HelloAppEngine.java
HelloAppEngine.java
App Engine Standard at localhost
http://localhost:8095/hello
Hello from JITESH To App Engine!