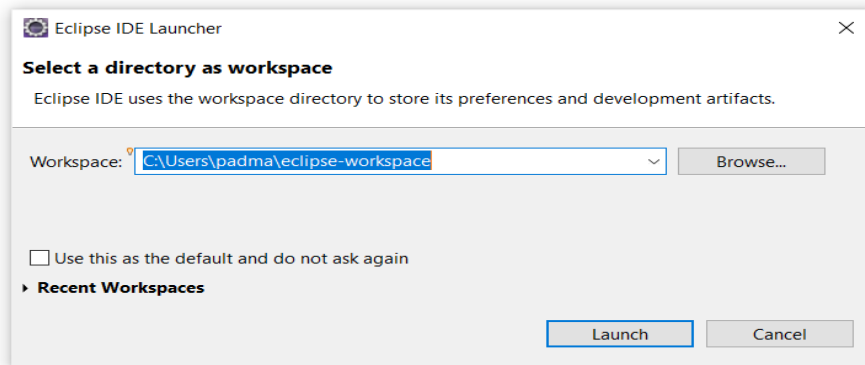


Practical No. 8

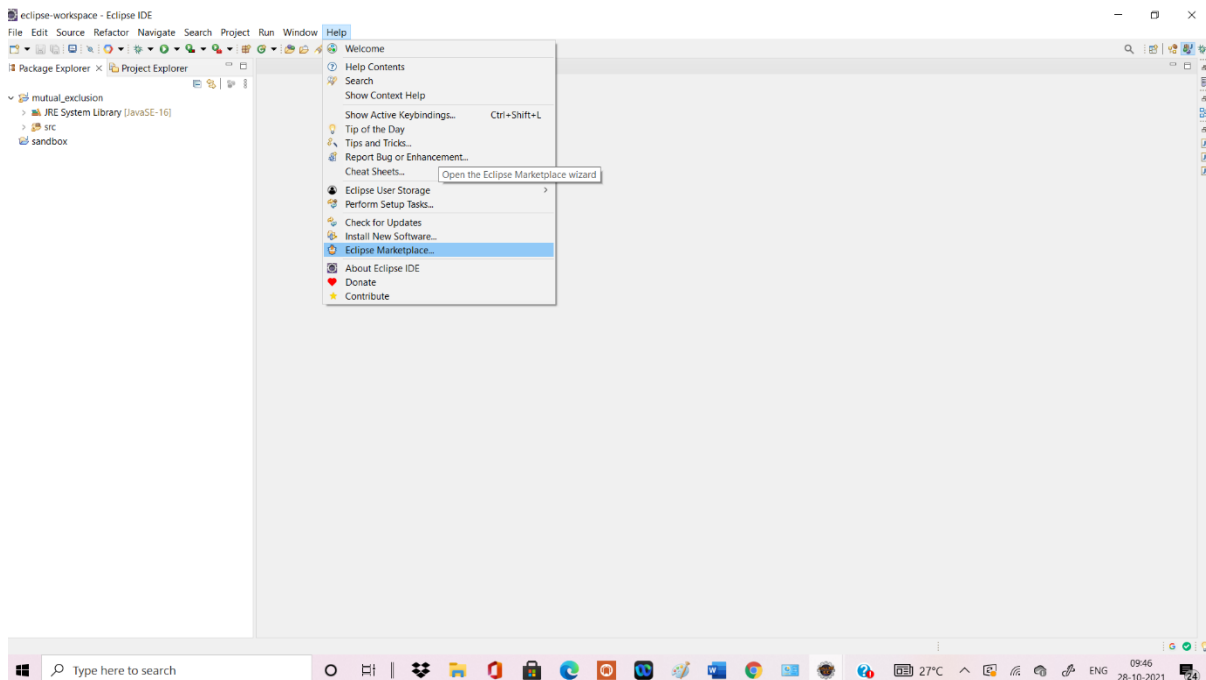
App Development using Cloud Computing

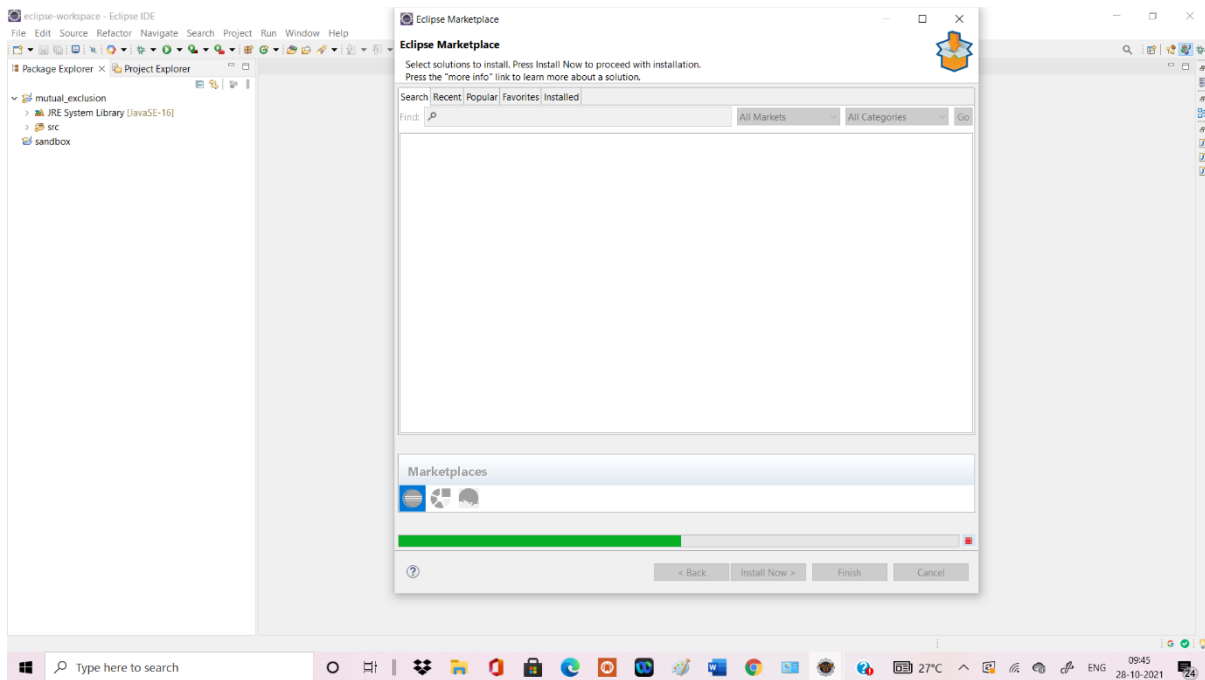
Aim: To develop applications using Google App Engine by using Eclipse IDE



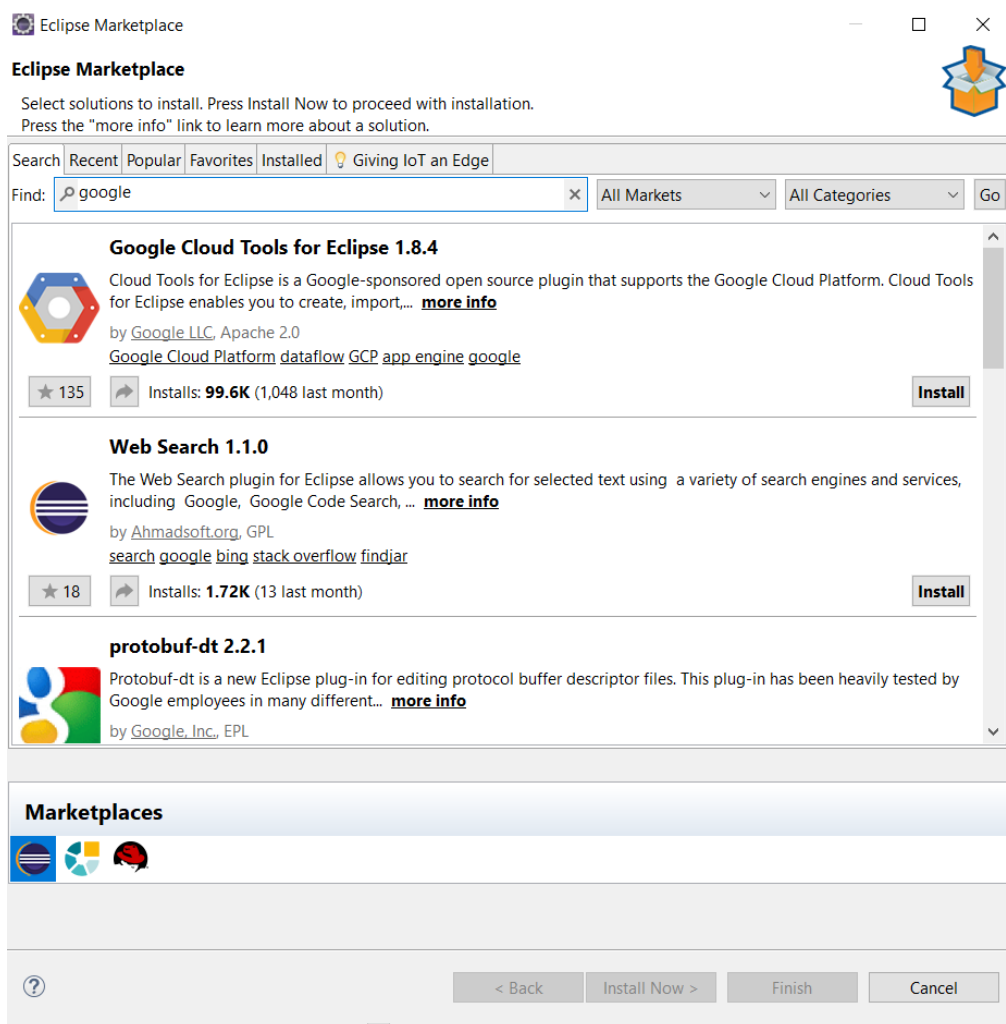
After Creating Workspace below screen will appear

Click on **HELP->Eclipse Marketplace**

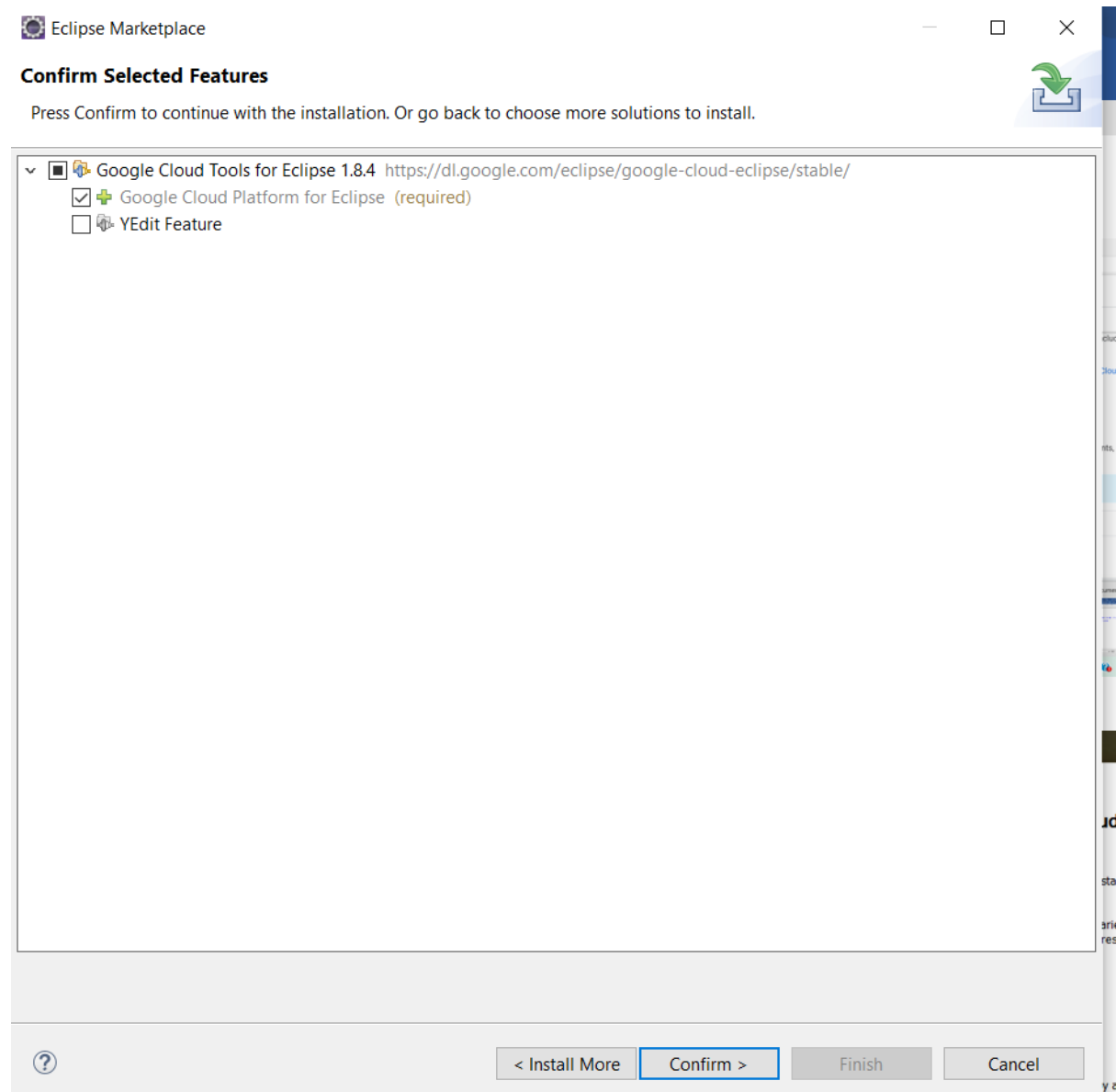


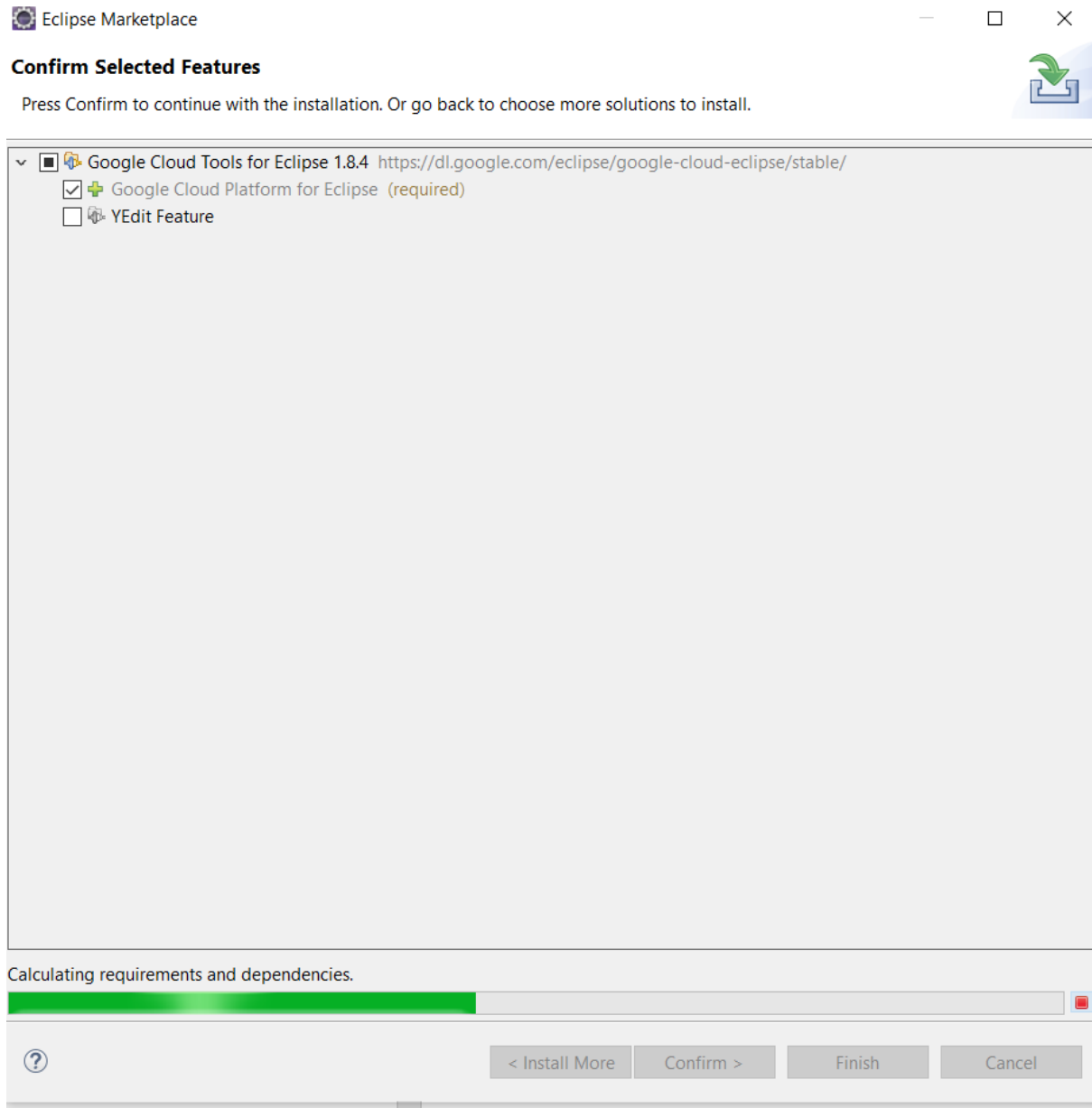


Once the Eclipse Marketplace window appear in search textbox write **google** click on enter

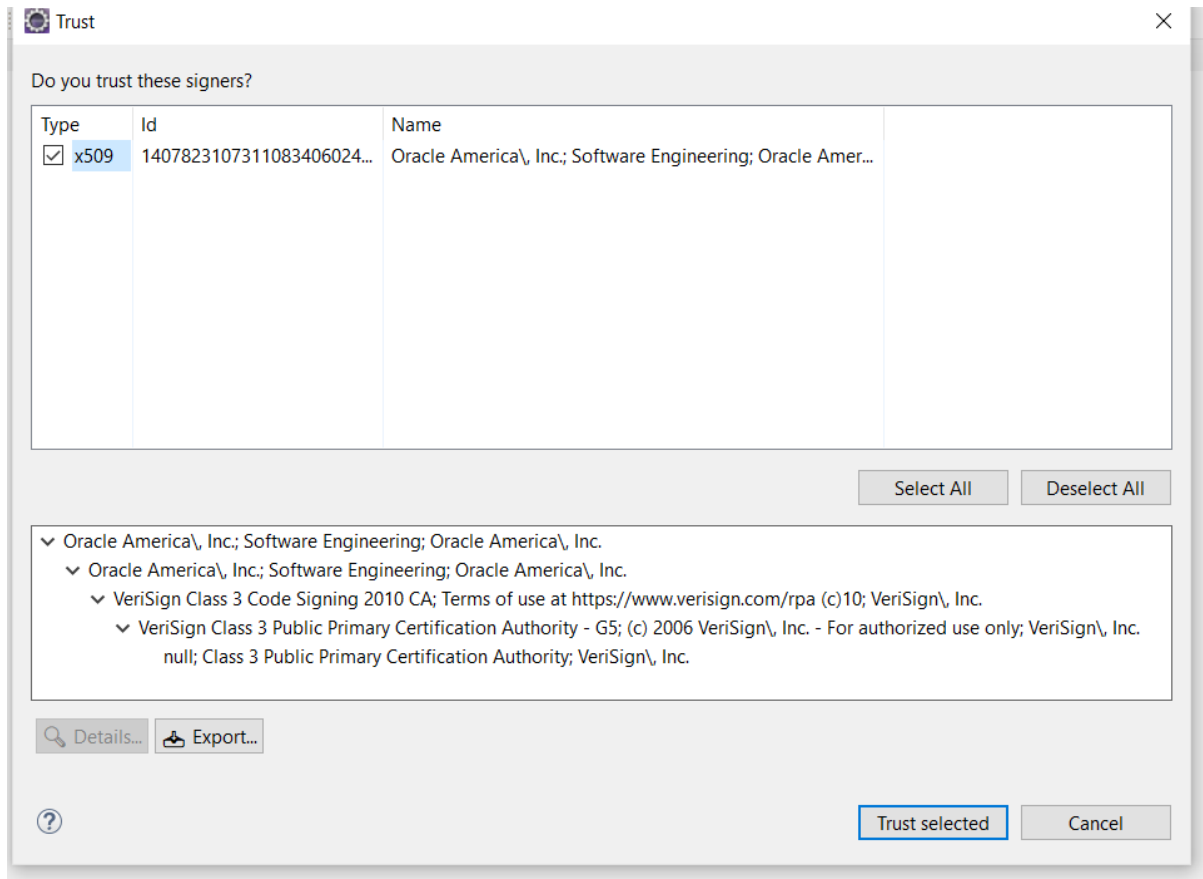


Click on Confirm

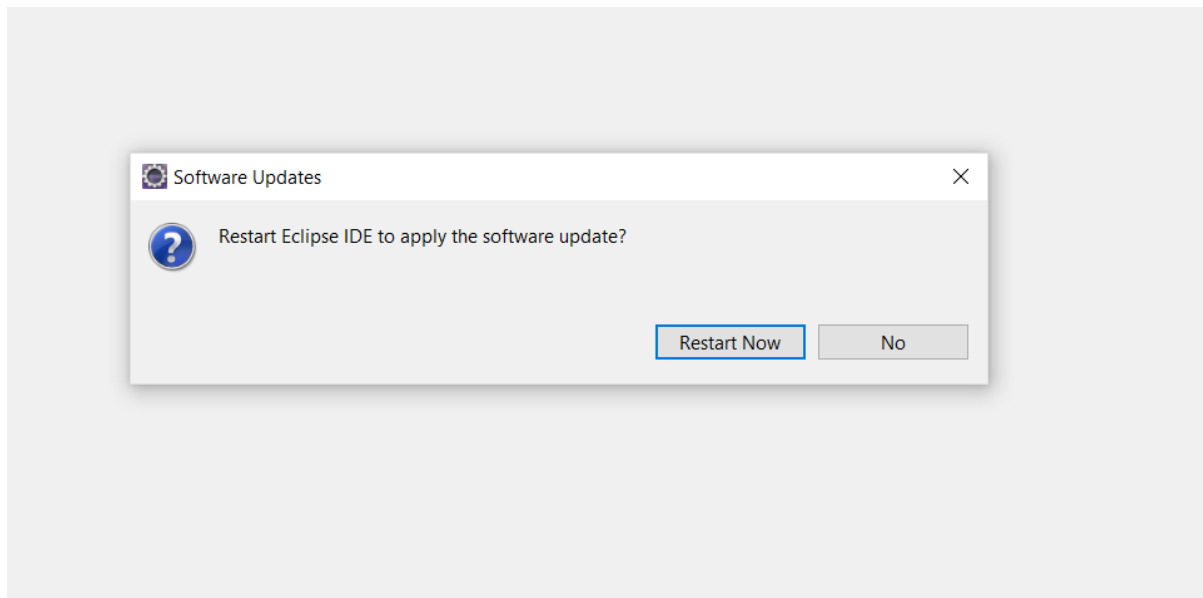




Once the below window appear click on **trust selected**



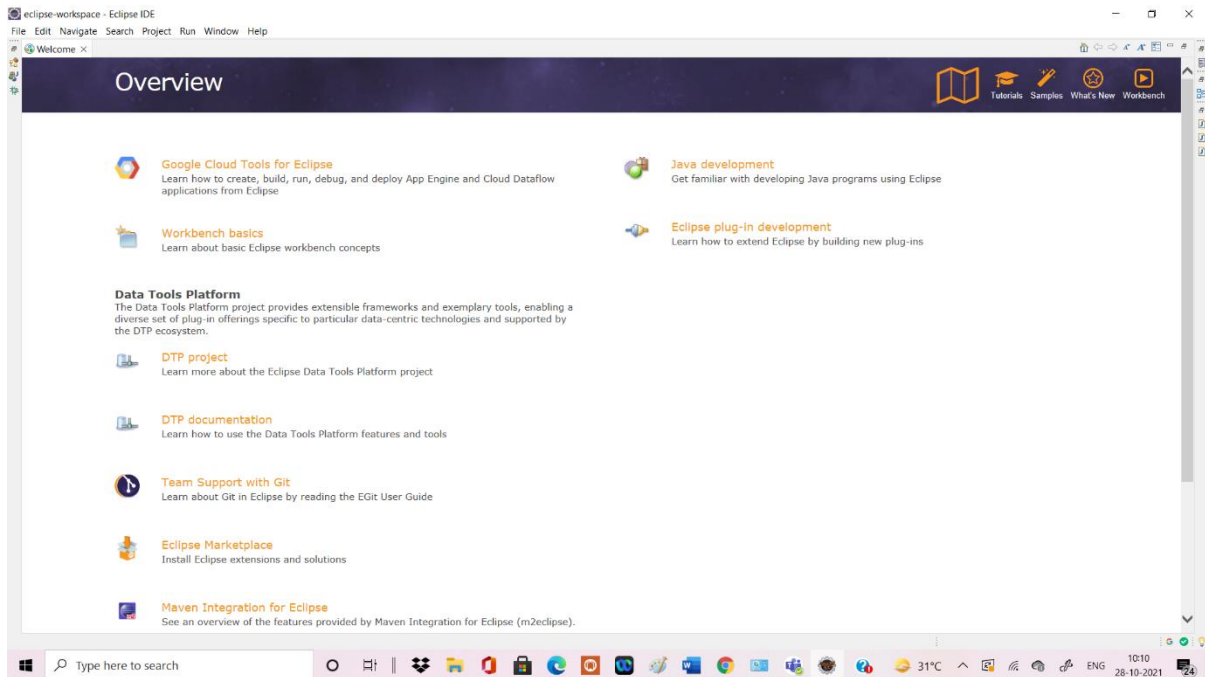
Click on restart now



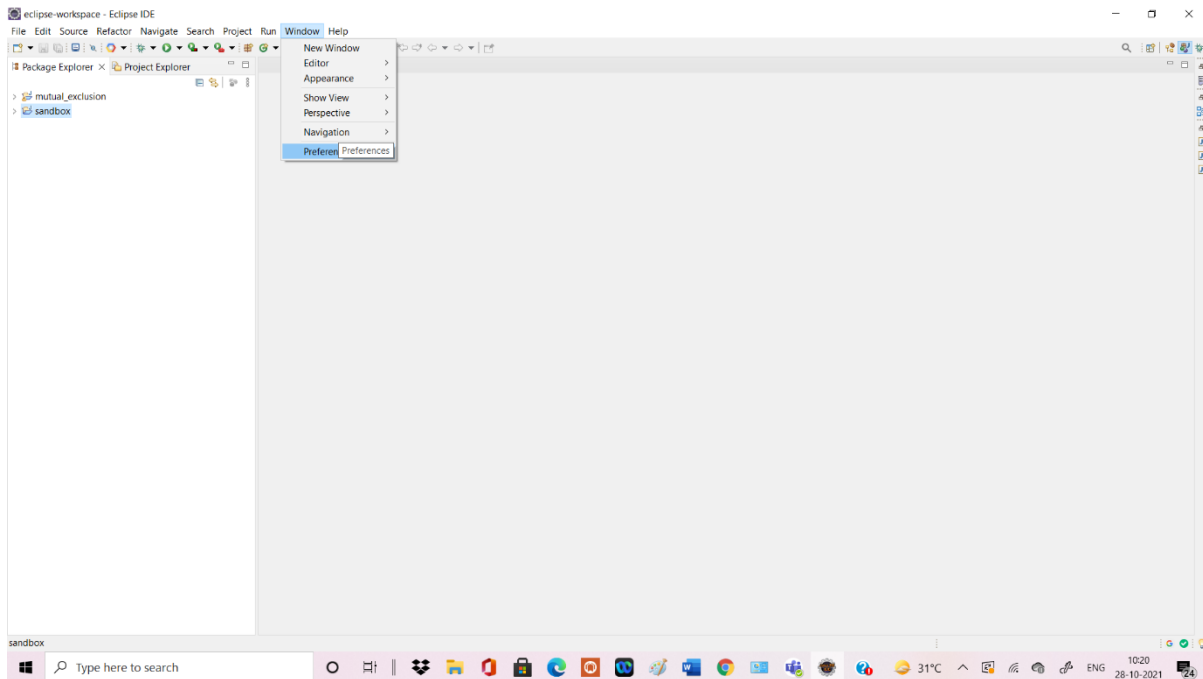
Below window will appear



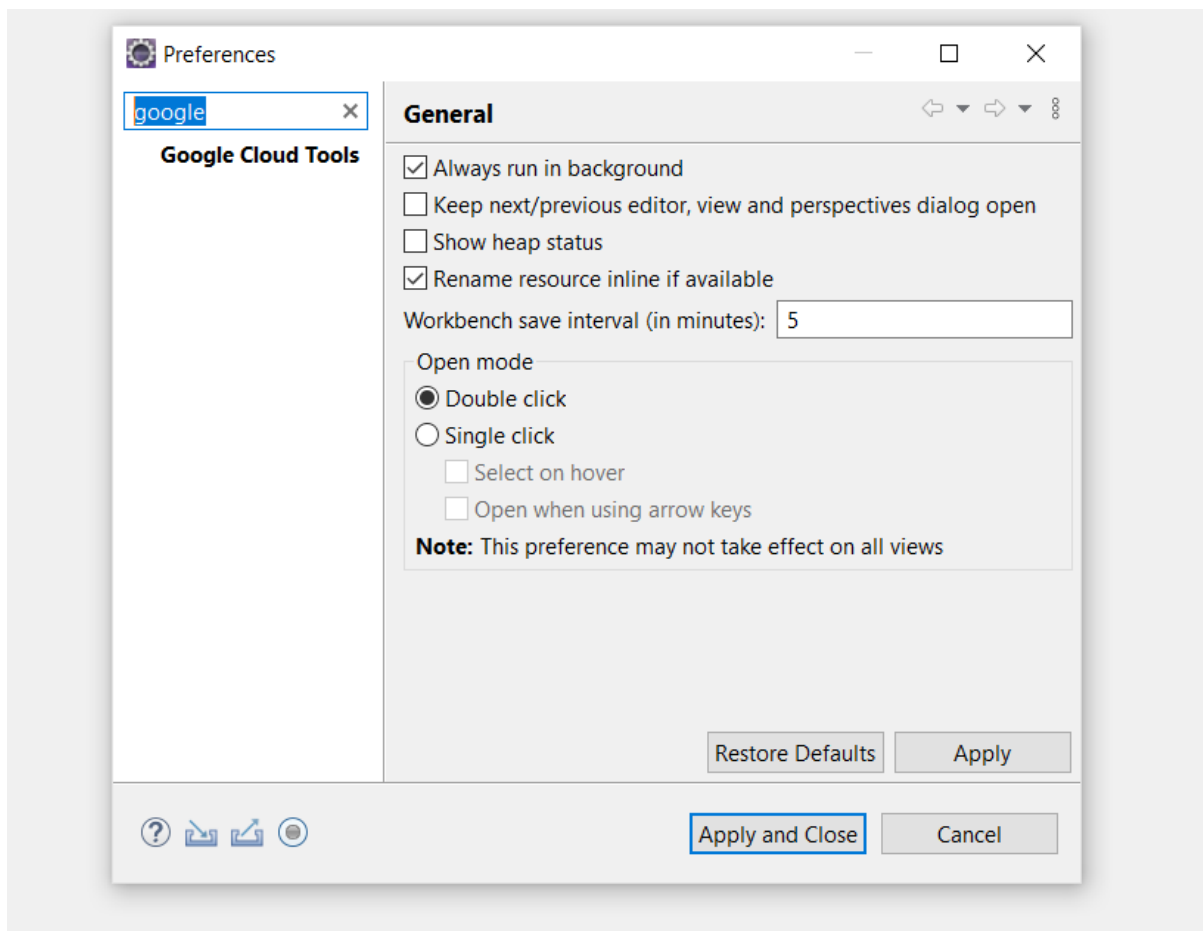
Below window will appear **close the welcome page**



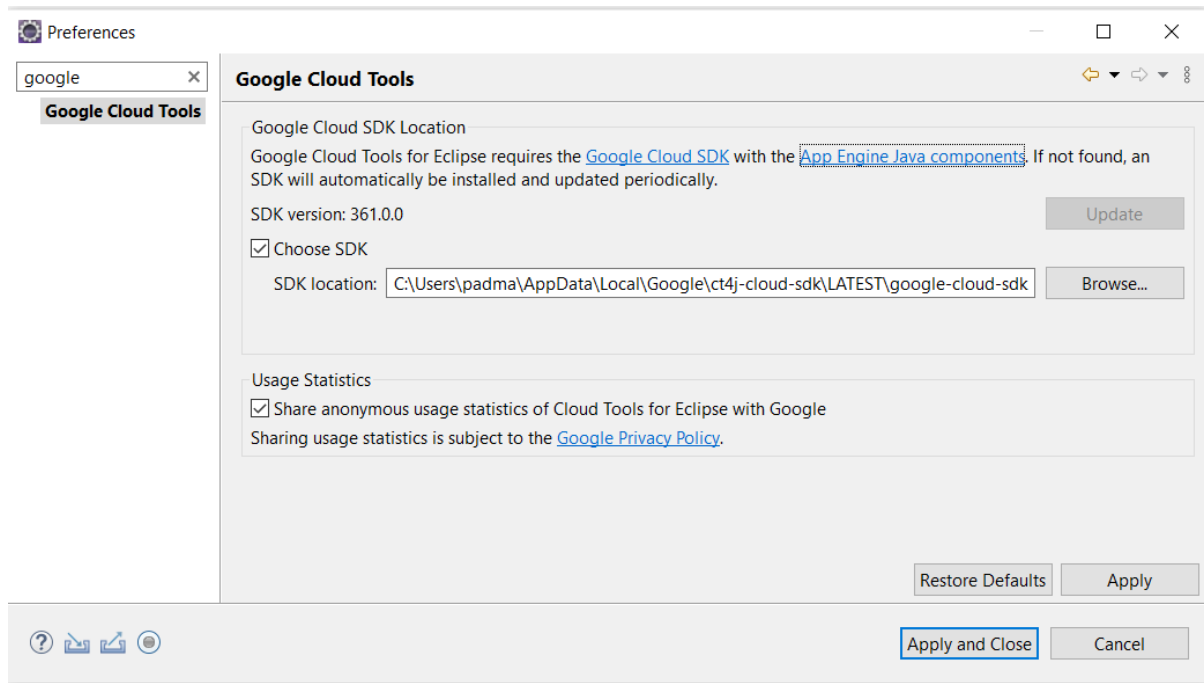
Once the eclipse window appear -click on **WINDOW->PREFERENCES**



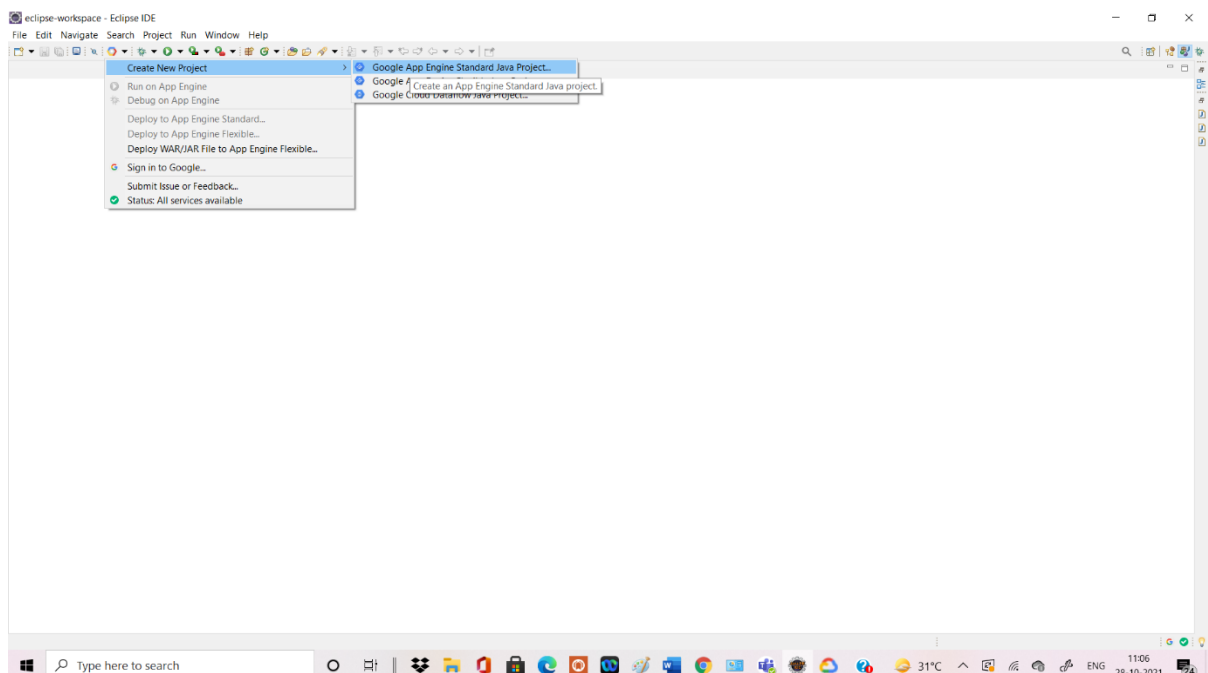
Below Preferences window will appear **SEARCH FOR GOOGLE**



Click for **APP ENGINE JAVA COMPONENTS** and click on **APPLY AND CLOSE**



In Eclipse workspace **click on dropdown ->Click ->Create New Project->Google App Engine Standard Java Project.**



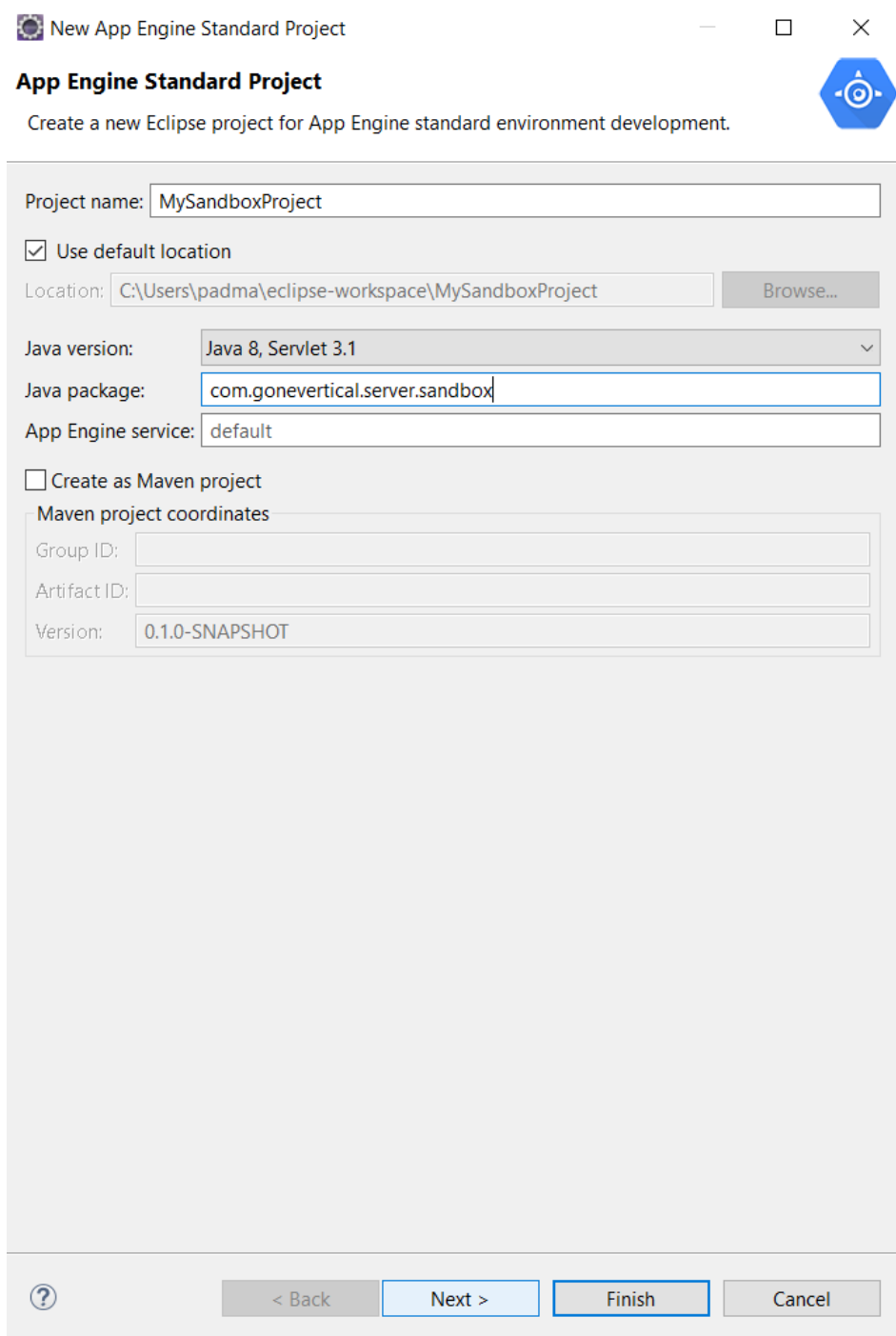
Below screen will appear New App Engine Standard Project

Provide the Project Name & Java Package as mentioned below

Project Name: **MySandboxProject**

Java Package: **com.gonevertical.server.sandbox**

Click on Next



The screenshot shows the 'New App Engine Standard Project' dialog box in Eclipse. The title bar reads 'New App Engine Standard Project'. Below the title bar, the text 'App Engine Standard Project' is displayed, followed by the instruction 'Create a new Eclipse project for App Engine standard environment development.' and the App Engine logo. The dialog contains several input fields and checkboxes:

- Project name:** MySandboxProject
- ☒ **Use default location**
- Location:** C:\Users\padma\eclipse-workspace\MySandboxProject (with a 'Browse...' button)
- Java version:** Java 8, Servlet 3.1 (dropdown menu)
- Java package:** com.gonevertical.server.sandbox
- App Engine service:** default
- ☐ **Create as Maven project**
- Maven project coordinates:**
 - Group ID:** (empty field)
 - Artifact ID:** (empty field)
 - Version:** 0.1.0-SNAPSHOT

At the bottom of the dialog, there is a help icon (?) and four buttons: '< Back', 'Next >', 'Finish', and 'Cancel'.

Below screen will appear

FROM App Engine Standard Libraries

Select 1.App Engine API

Select 2.Objectify

3.Click on Finish

New App Engine Standard Project

Google Cloud Platform Libraries

Additional jars for applications using Google Cloud Platform

App Engine Standard Libraries

- ☒ App Engine API
- ☐ Google Cloud Endpoints
- ☒ Objectify

Cloud Client Libraries for Java

- ☐ BigQuery API
- ☐ BigQuery Data Transfer API
- ☐ Cloud Asset API
- ☐ Cloud Auto ML API
- ☐ Cloud Container Analysis API
- ☐ Cloud Data Loss Prevention
- ☐ Cloud Datastore
- ☐ Cloud DNS
- ☐ Cloud Firestore
- ☐ Cloud KMS
- ☐ Cloud Natural Language
- ☐ Cloud OS Login
- ☐ Cloud Pub/Sub
- ☐ Cloud Redis
- ☐ Cloud Resource Manager
- ☐ Cloud Scheduler
- ☐ Cloud Security Scanner
- ☐ Cloud Spanner
- ☐ Cloud Speech
- ☐ Cloud Storage
- ☐ Cloud Talent Solution
- ☐ Cloud Tasks
- ☐ Cloud Translation
- ☐ Cloud Video Intelligence
- ☐ Cloud Vision
- ☐ Dialogflow
- ☐ IoT Core
- ☐ Kubernetes
- ☐ Phishing Protection
- ☐ reCAPTCHA Enterprise

? < Back Next > Finish Cancel

New App Engine Standard Project

Google Cloud Platform Libraries

Additional jars for applications using Google Cloud Platform

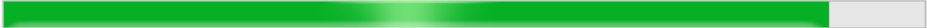
App Engine Standard Libraries


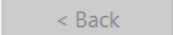
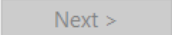

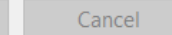
- ☒ App Engine API
- ☐ Google Cloud Endpoints
- ☒ Objectify

Cloud Client Libraries for Java

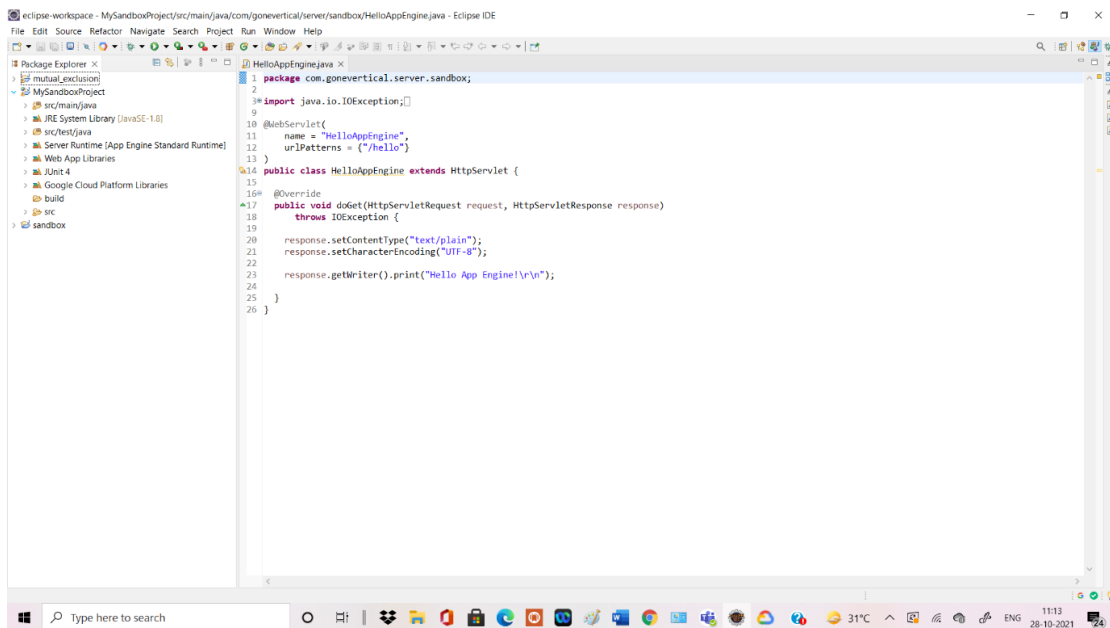
- ☐ BigQuery API
- ☐ BigQuery Data Transfer API
- ☐ Cloud Asset API
- ☐ Cloud Auto ML API
- ☐ Cloud Container Analysis API
- ☐ Cloud Data Loss Prevention
- ☐ Cloud Datastore
- ☐ Cloud DNS
- ☐ Cloud Firestore
- ☐ Cloud KMS
- ☐ Cloud Natural Language
- ☐ Cloud OS Login
- ☐ Cloud Pub/Sub
- ☐ Cloud Redis
- ☐ Cloud Resource Manager
- ☐ Cloud Scheduler
- ☐ Cloud Security Scanner
- ☐ Cloud Spanner
- ☐ Cloud Speech
- ☐ Cloud Storage
- ☐ Cloud Talent Solution
- ☐ Cloud Tasks
- ☐ Cloud Translation
- ☐ Cloud Video Intelligence
- ☐ Cloud Vision
- ☐ Dialogflow
- ☐ IoT Core
- ☐ Kubernetes
- ☐ Phishing Protection
- ☐ reCAPTCHA Enterprise

Installing App Engine Java Standard Environment facet...

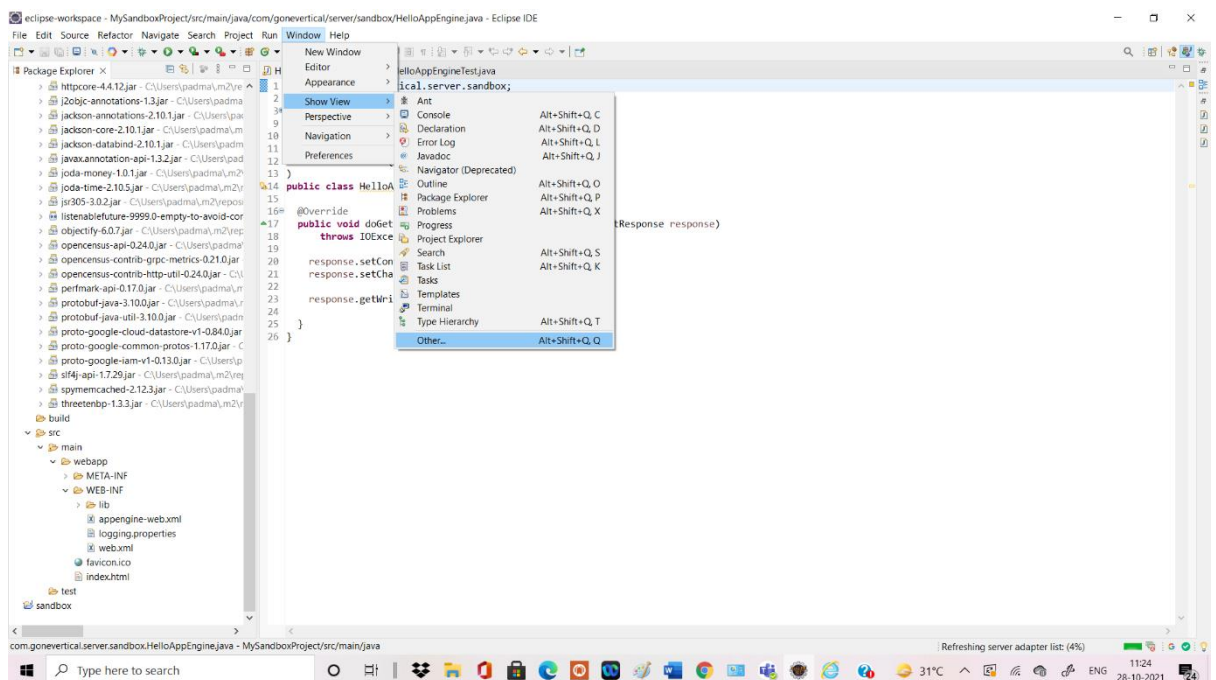


Below Screen will Appear **HelloAppEngine.Java**

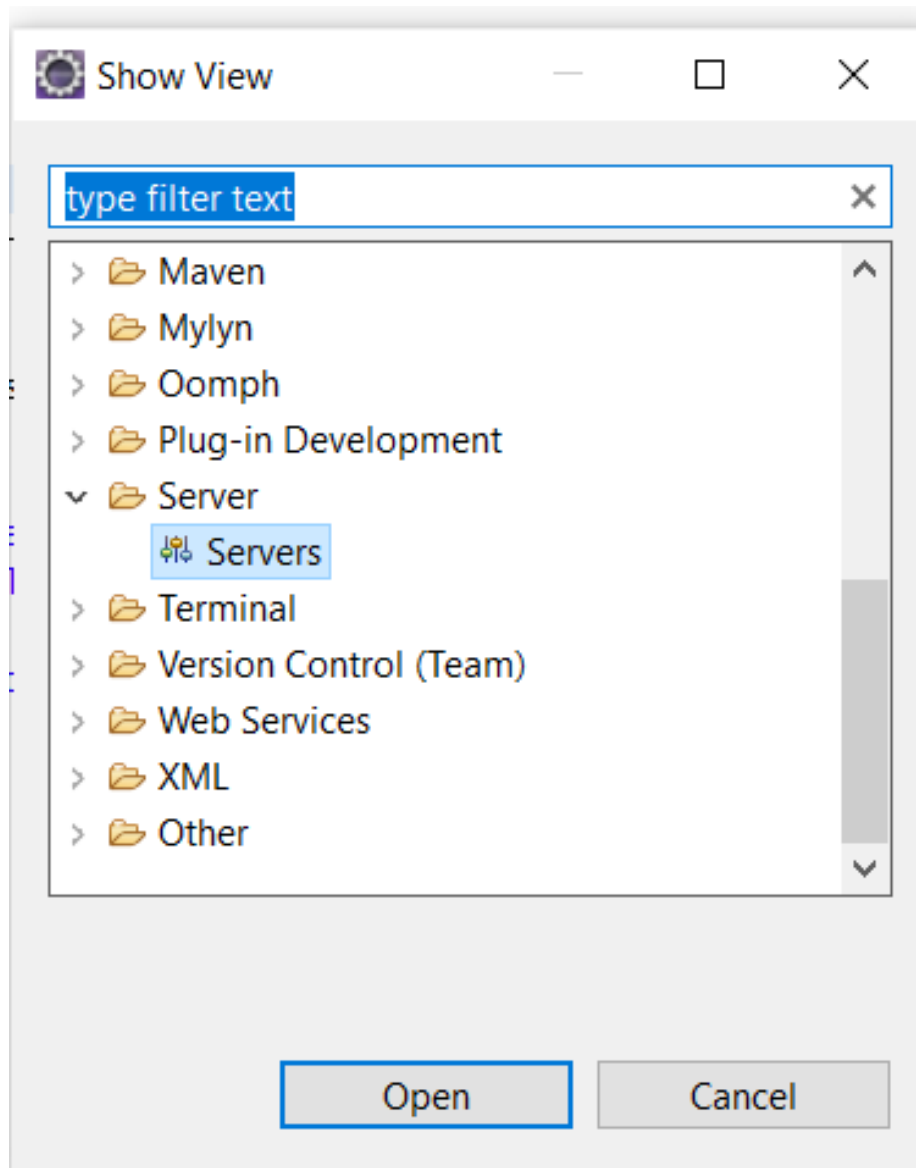


Go to **Window->Show View->Other**



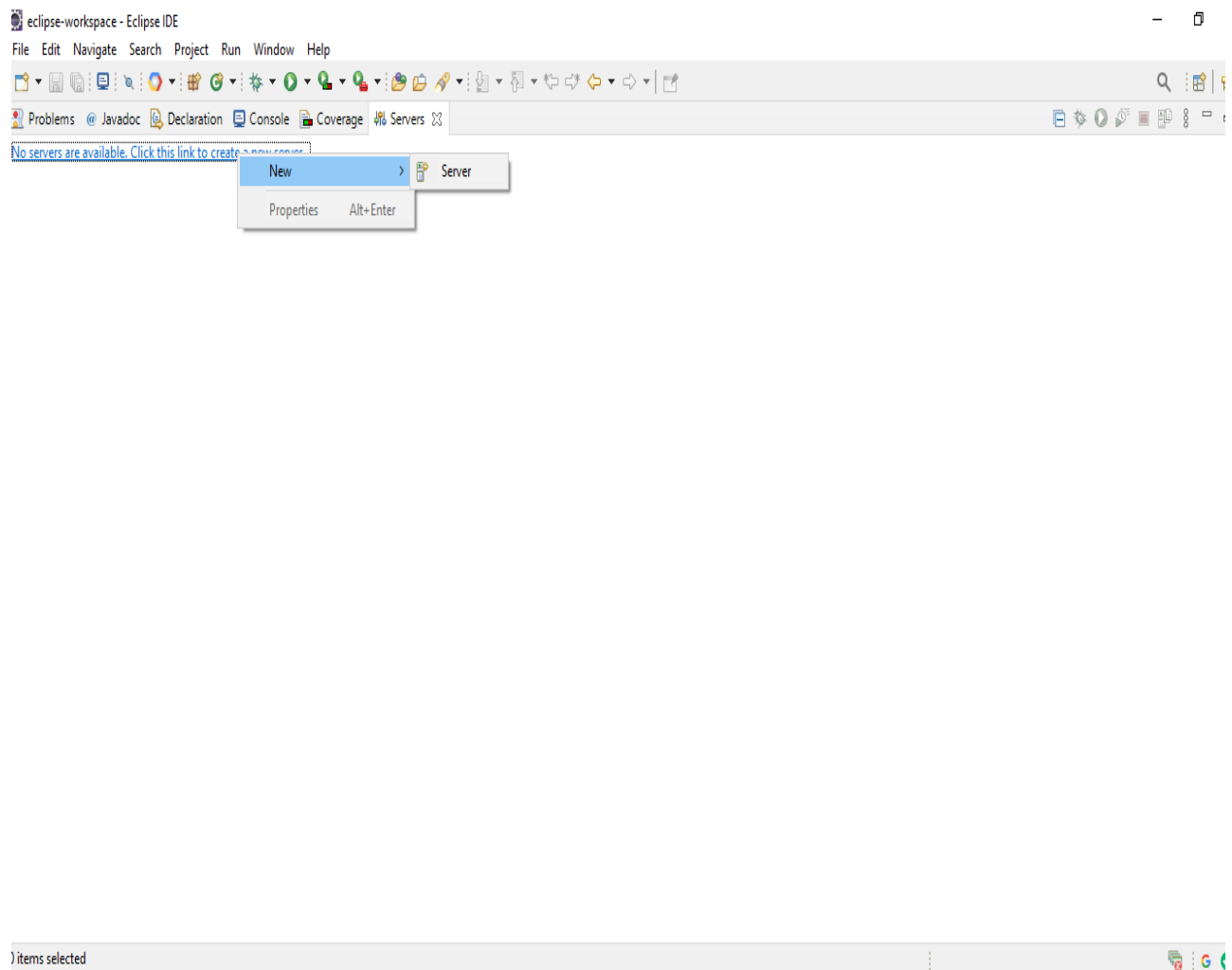
After clicking on **other** below Screen of **Show View** will appear

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



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Right click on server ->New->Server



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

New Server

Define a New Server

Choose the type of server to create

Select the server type:

type filter text

- > Apache
- > Basic
- ▼ Google
 - App Engine Standard
- > IBM
- > Oracle

Publishes and runs projects on a local App Engine server

Server's host name: localhost

Server name: App Engine Standard at localhost

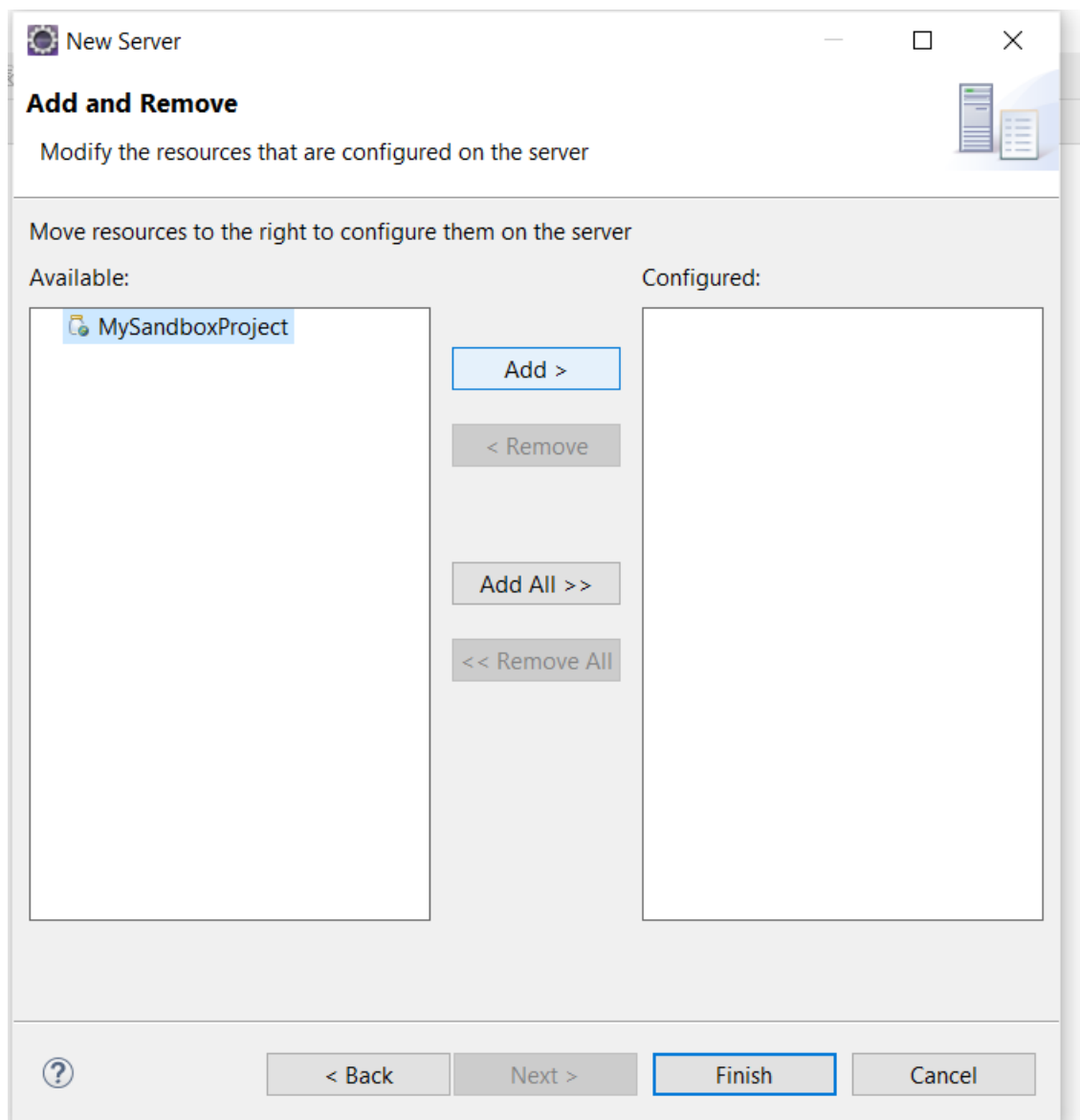
Server runtime environment: App Engine Standard Runtime [Add...](#)

[Configure runtime environments...](#)

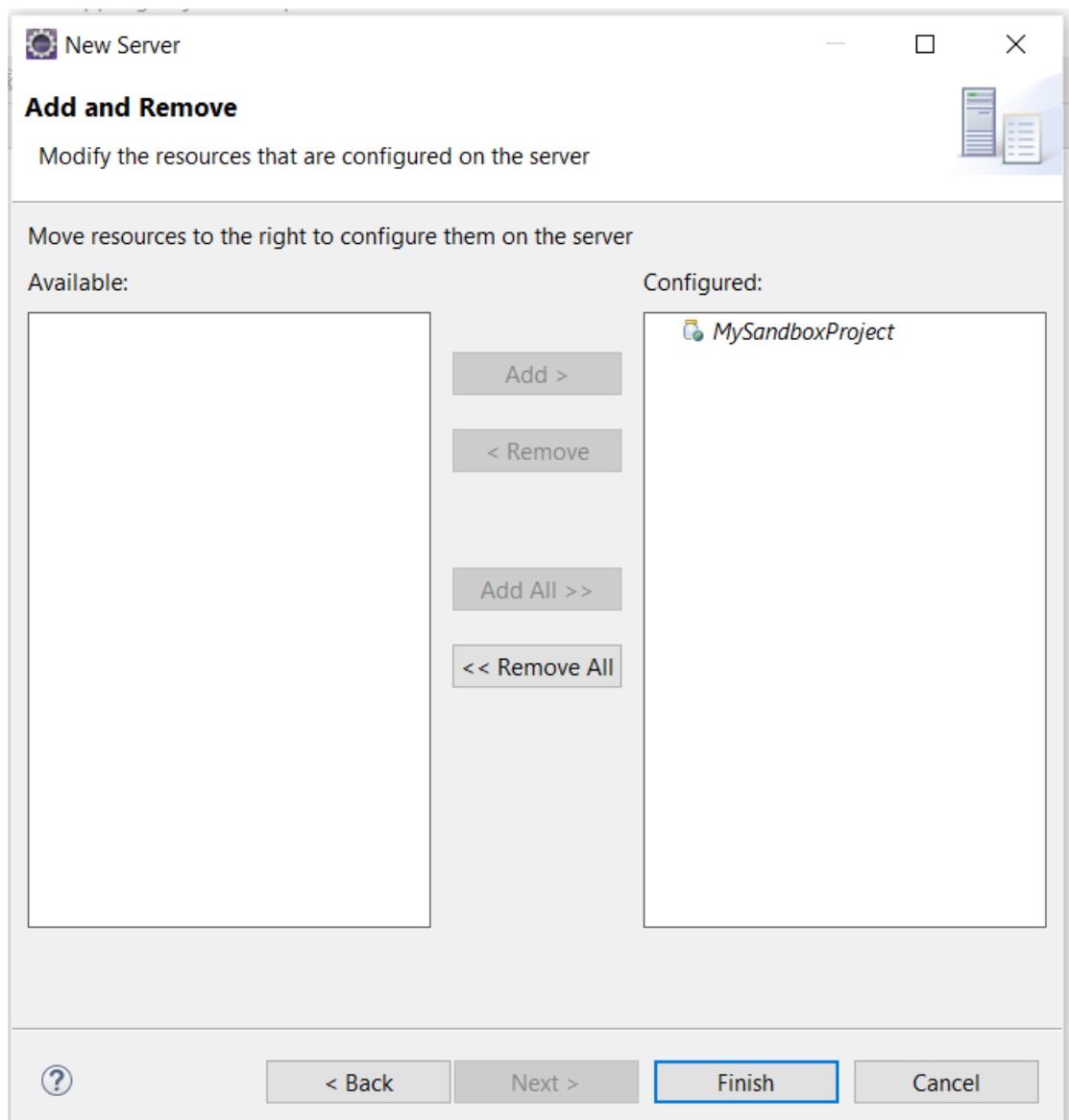
Server port: 8080

? < Back Next > Finish Cancel

Select from Available Project: **MySandboxProject** and then **click on Add Button**



After adding **MySandboxProject** in Configured then **Click on Finish Button**



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Click to Execute → App Engine Standard at Localhost

Final Output Screen will appear

