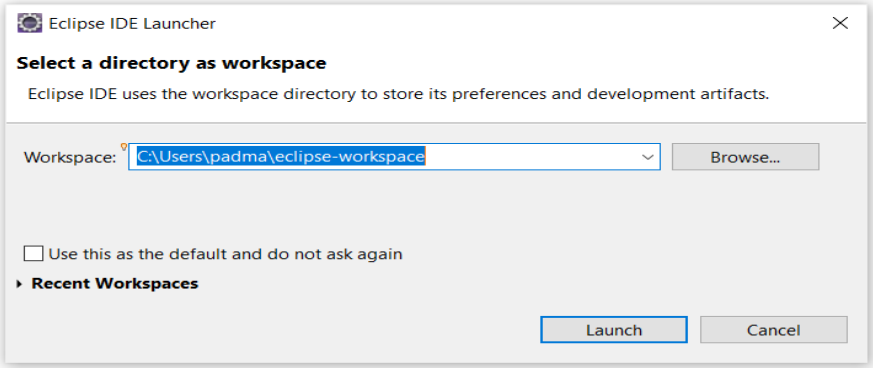
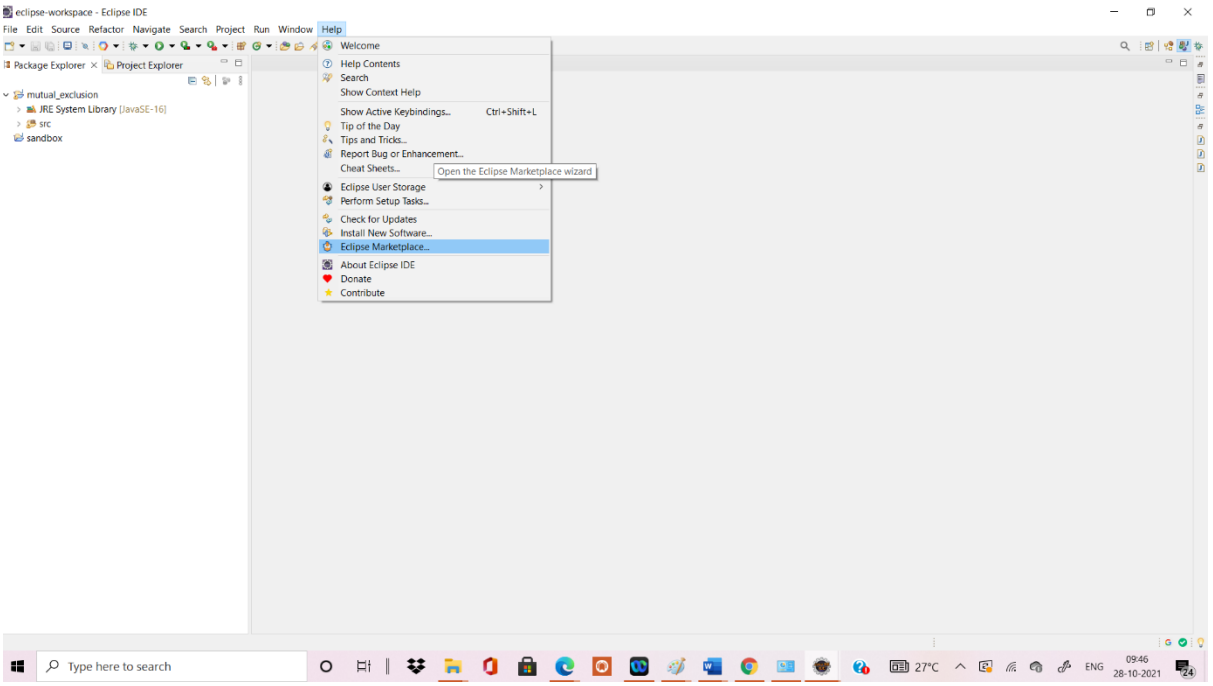
Write a Program to developed an Application using Google App Engine by using Eclipse IDE

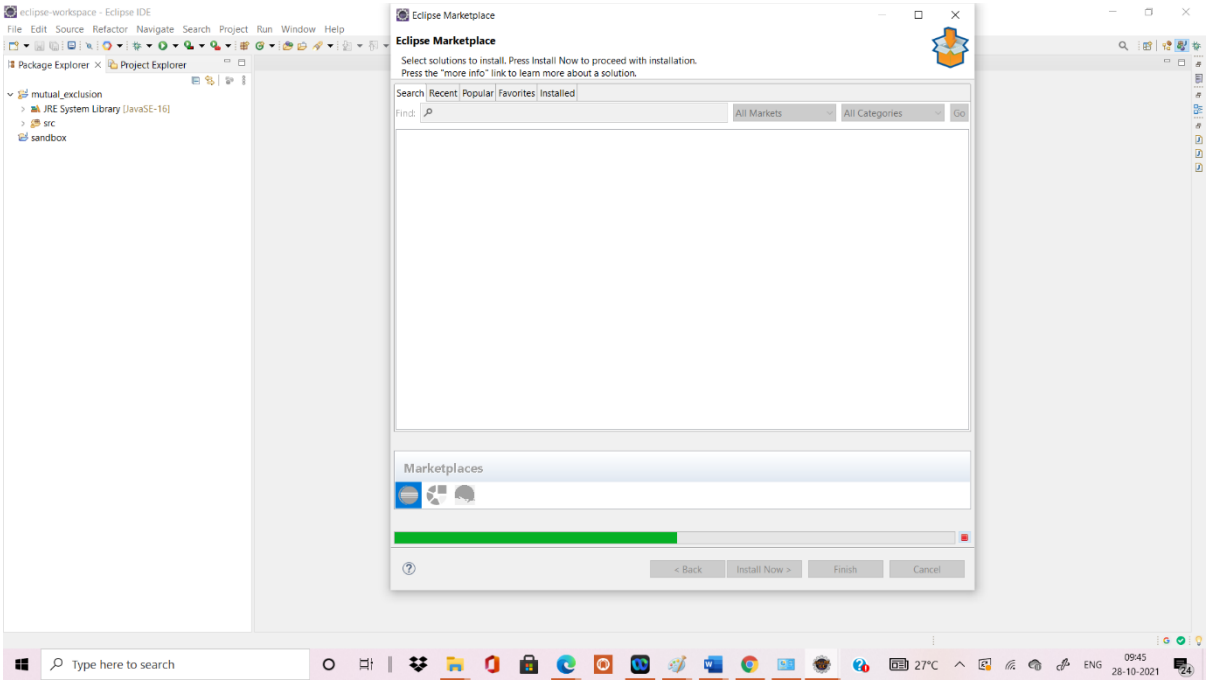
Step 1



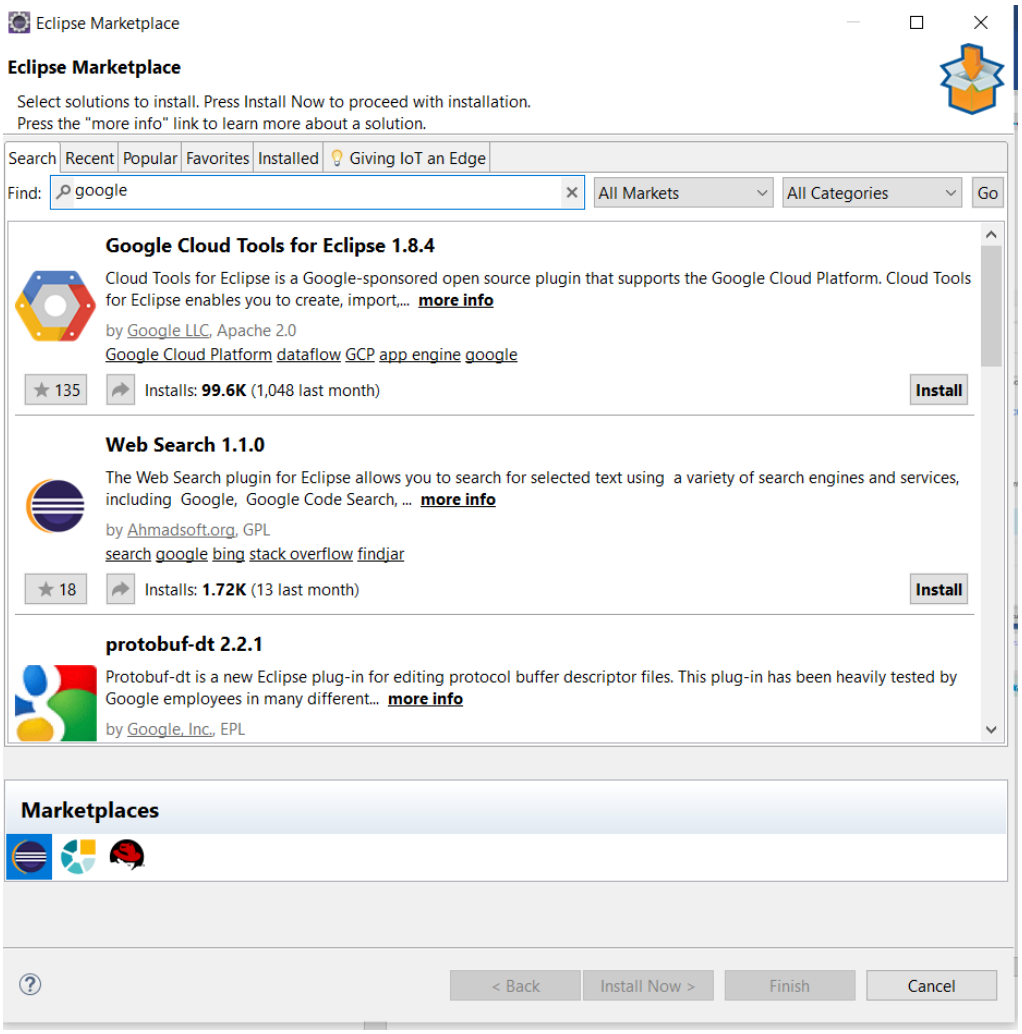
After Creating Workspace below screen will appear

Click on **HELP->Eclipse Marketplace**

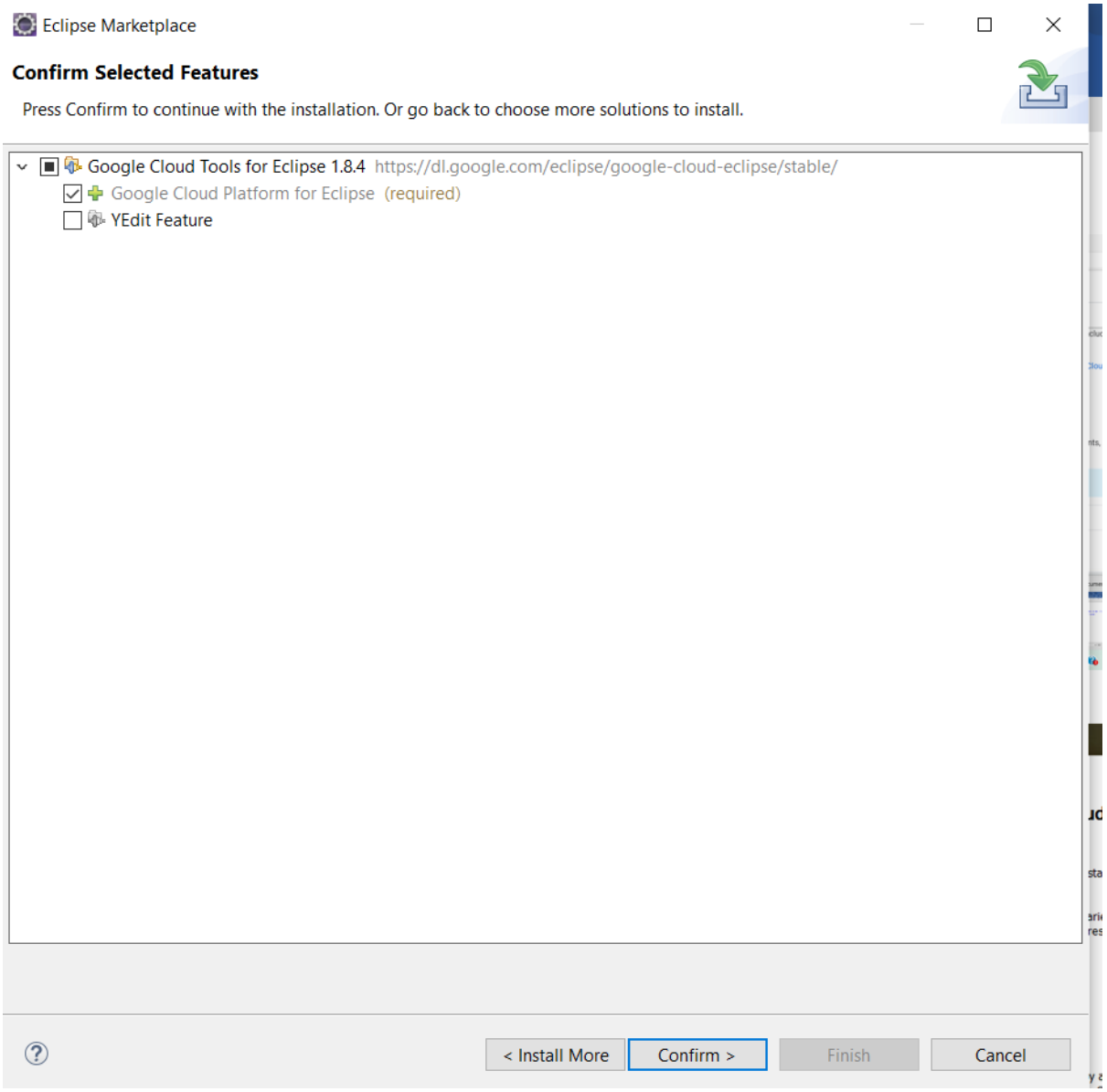


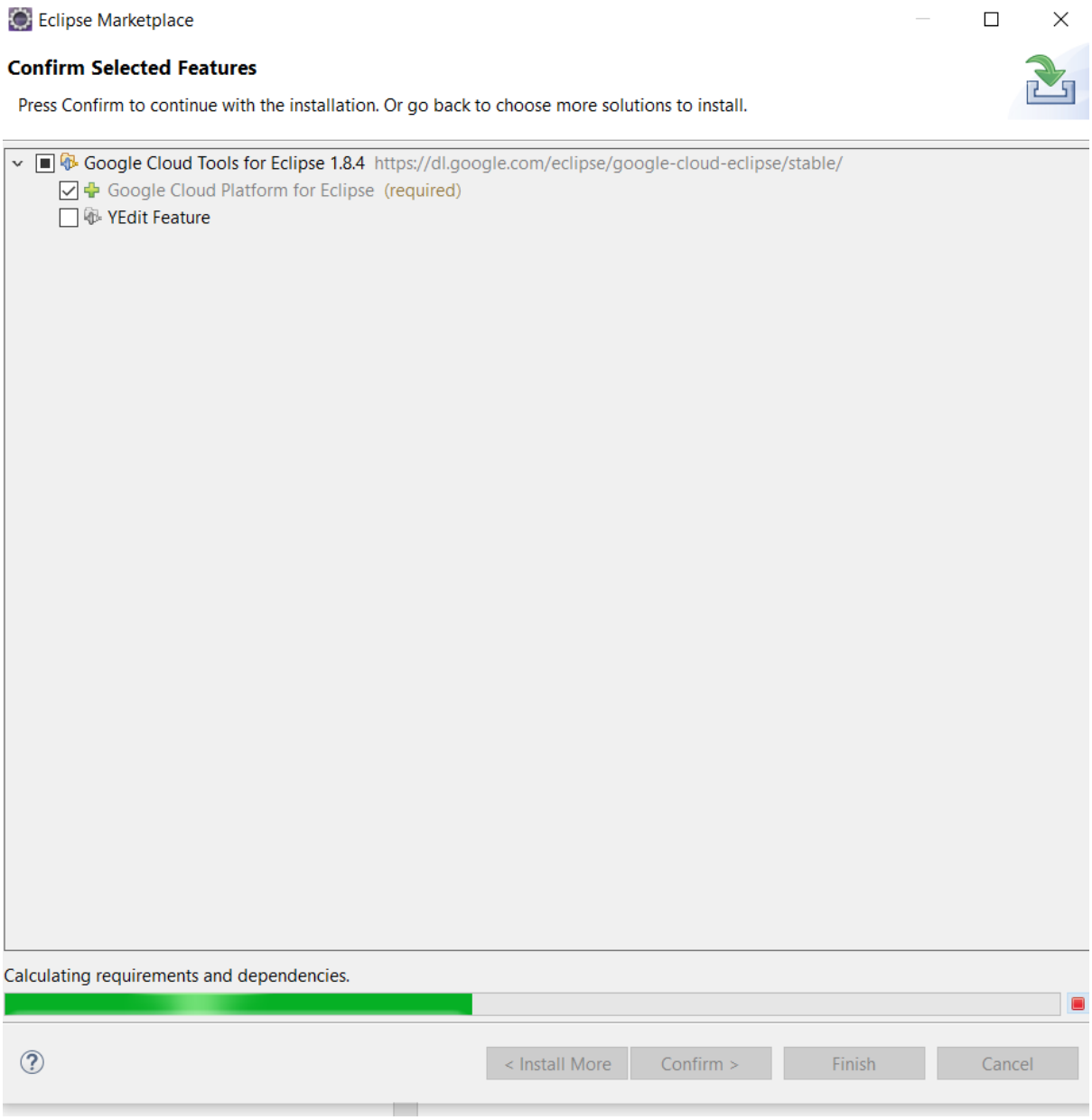


Once the Eclipse Marketplace window appear in search textbox write **google** click on enter

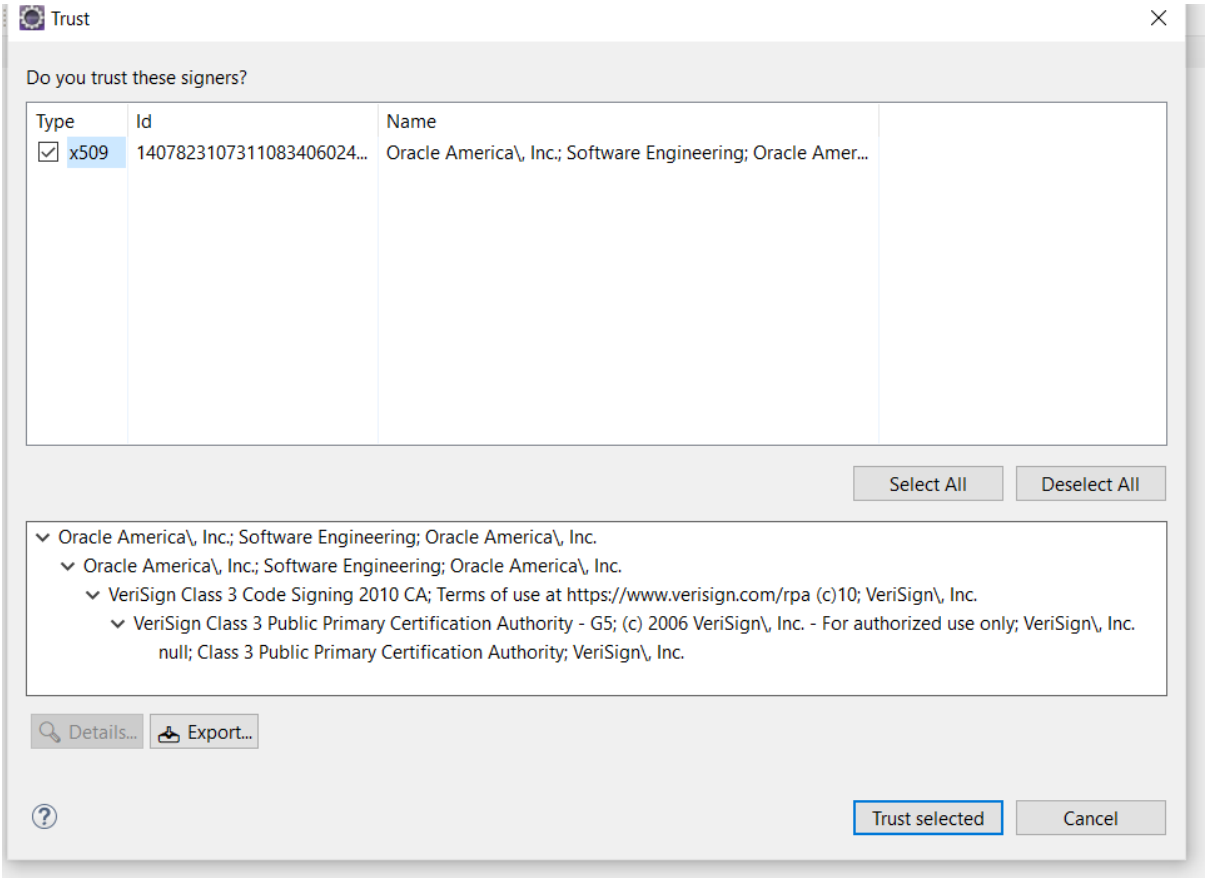


Click on Confirm

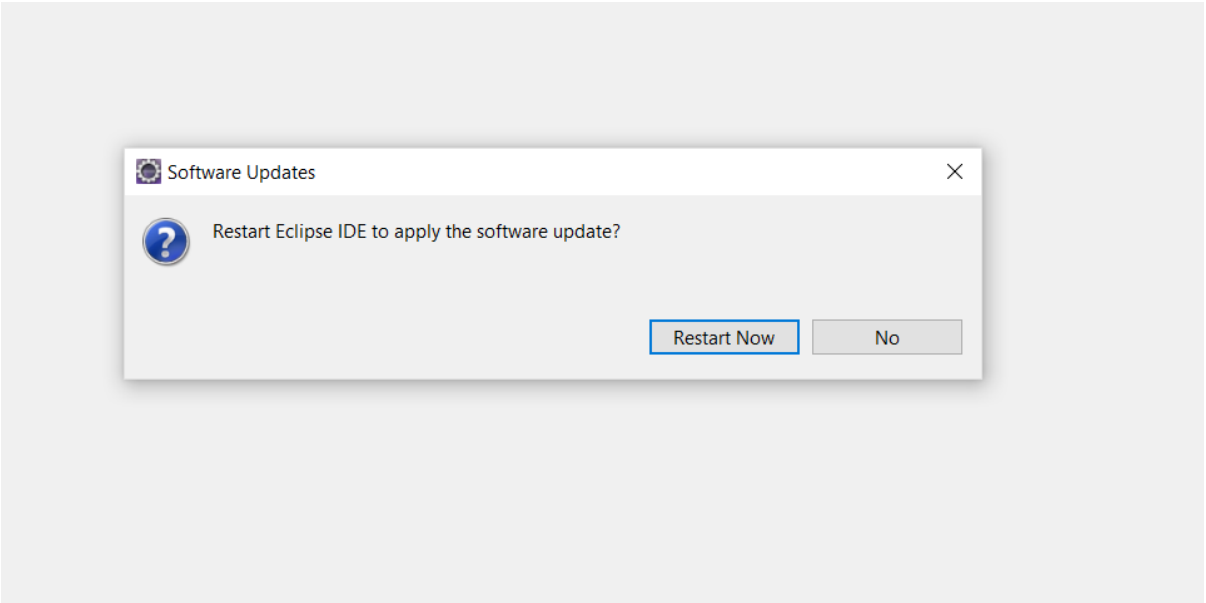



Eclipse Marketplace
Confirm Selected Features
Press Confirm to continue with the installation. Or go back to choose more solutions to install.
Google Cloud Tools for Eclipse 1.8.4 https://dl.google.com/eclipse/google-cloud-eclipse/stable/
Google Cloud Platform for Eclipse (required)
YEdit Feature
Calculating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

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

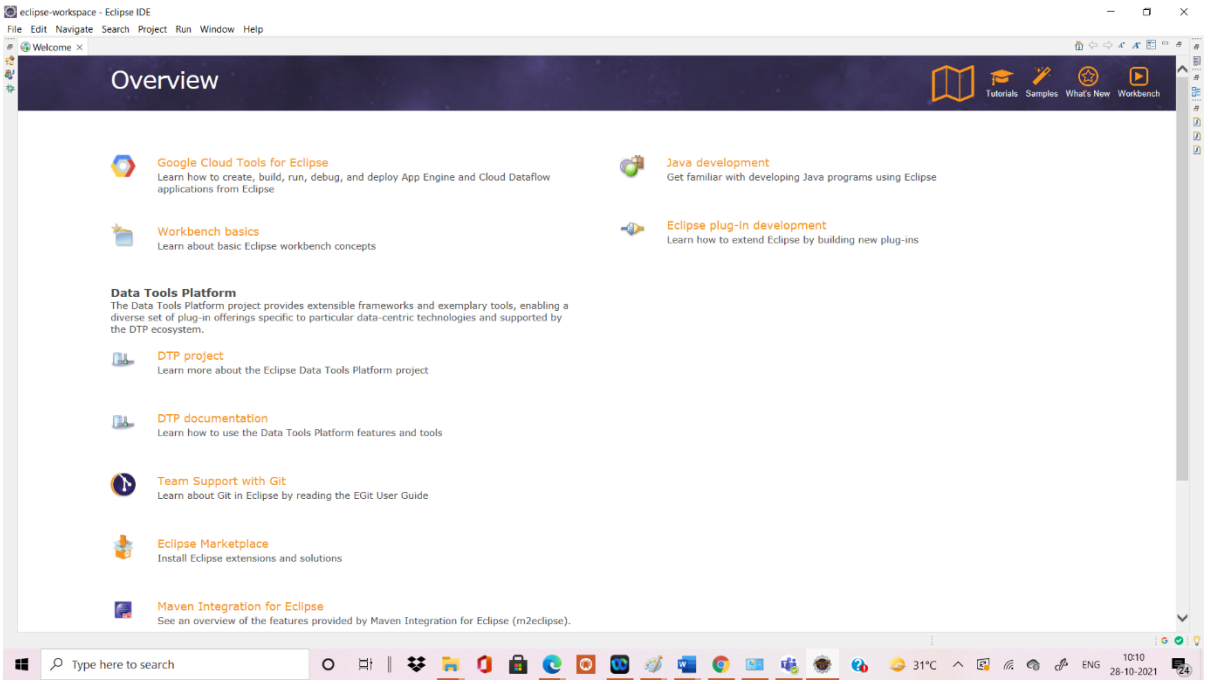


Click on restart now



Below window will appear

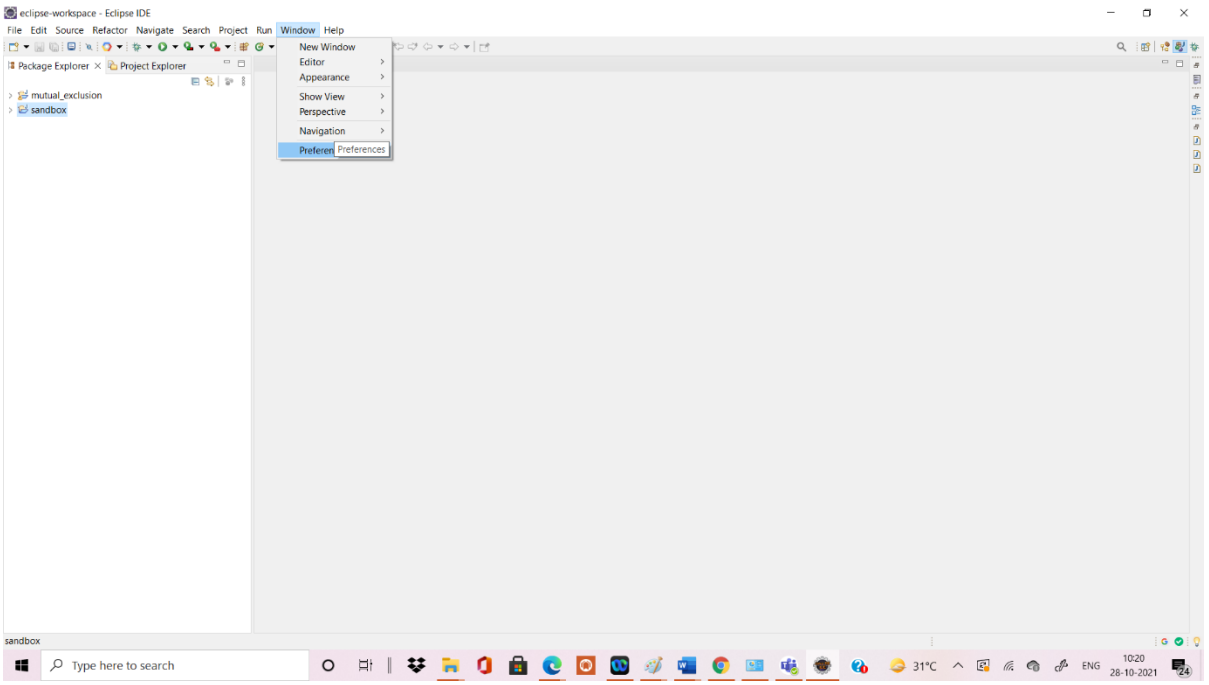
Below window will appear **close the welcome page**



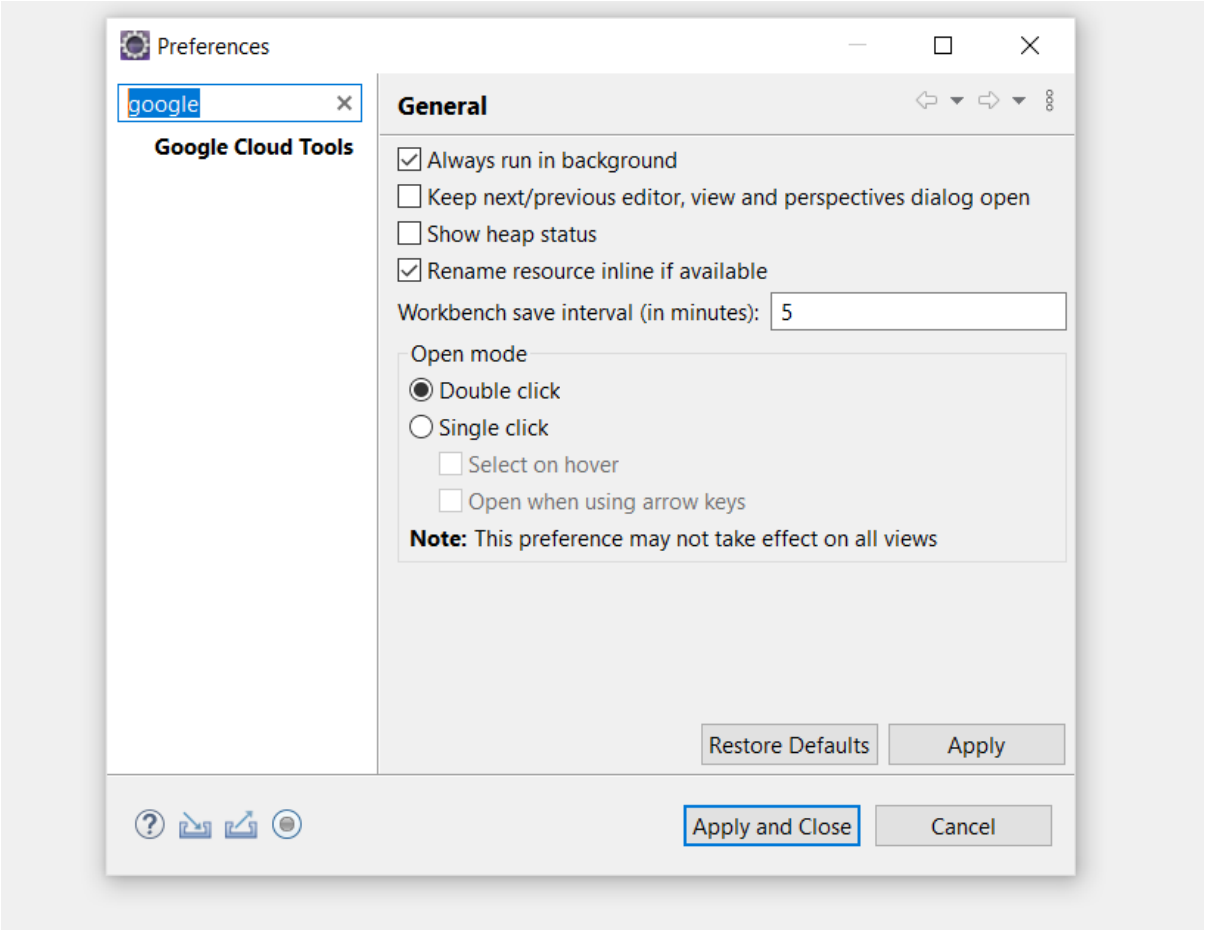
Step 2

This Step is optional(if tools doesn't get installed)

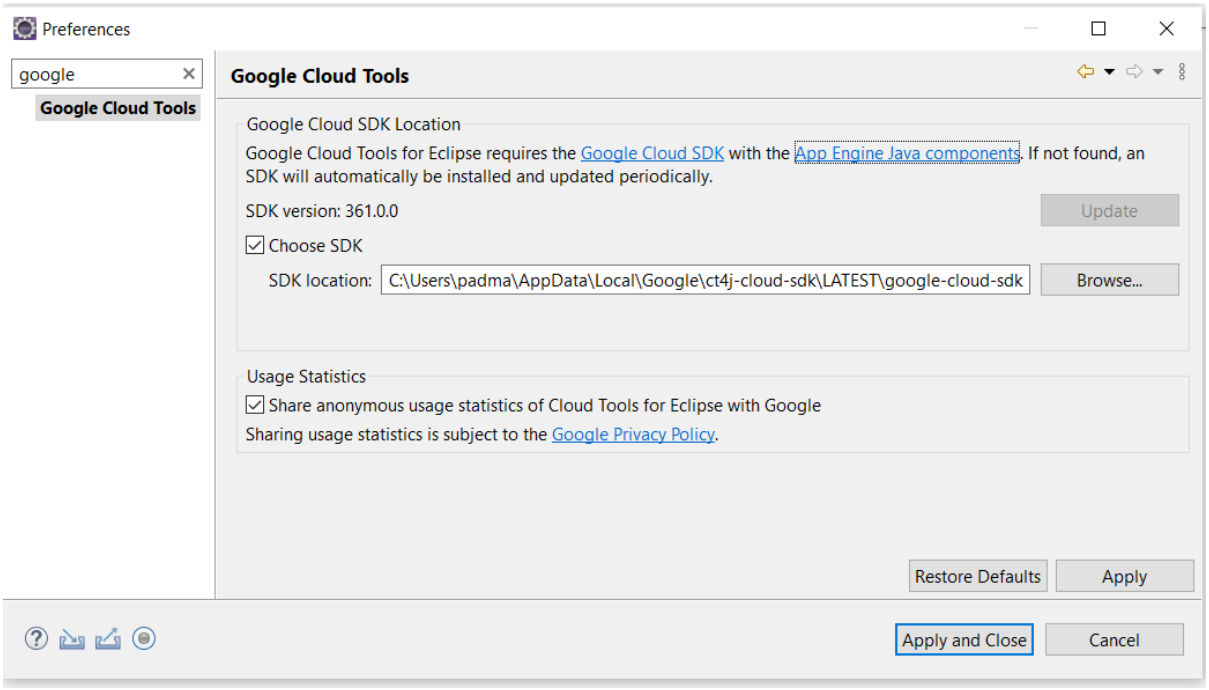
Once the eclipse window appear -click on WINDOW->PREFERENCES



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



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

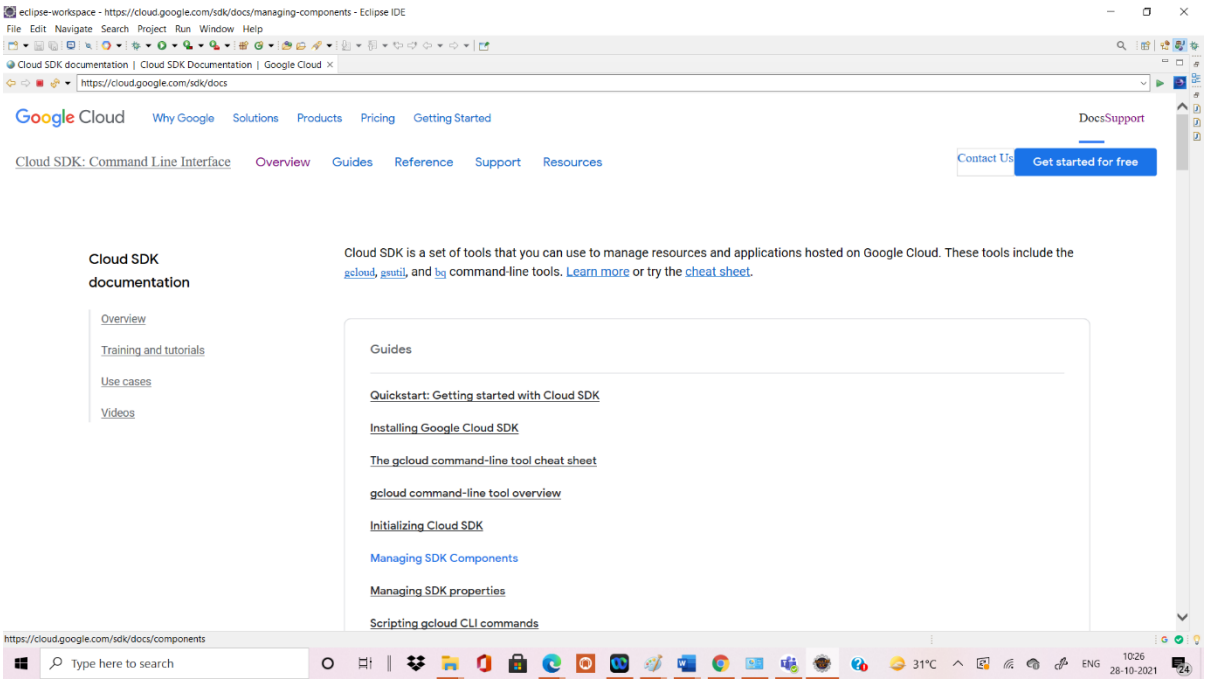


If below Screen does not appear

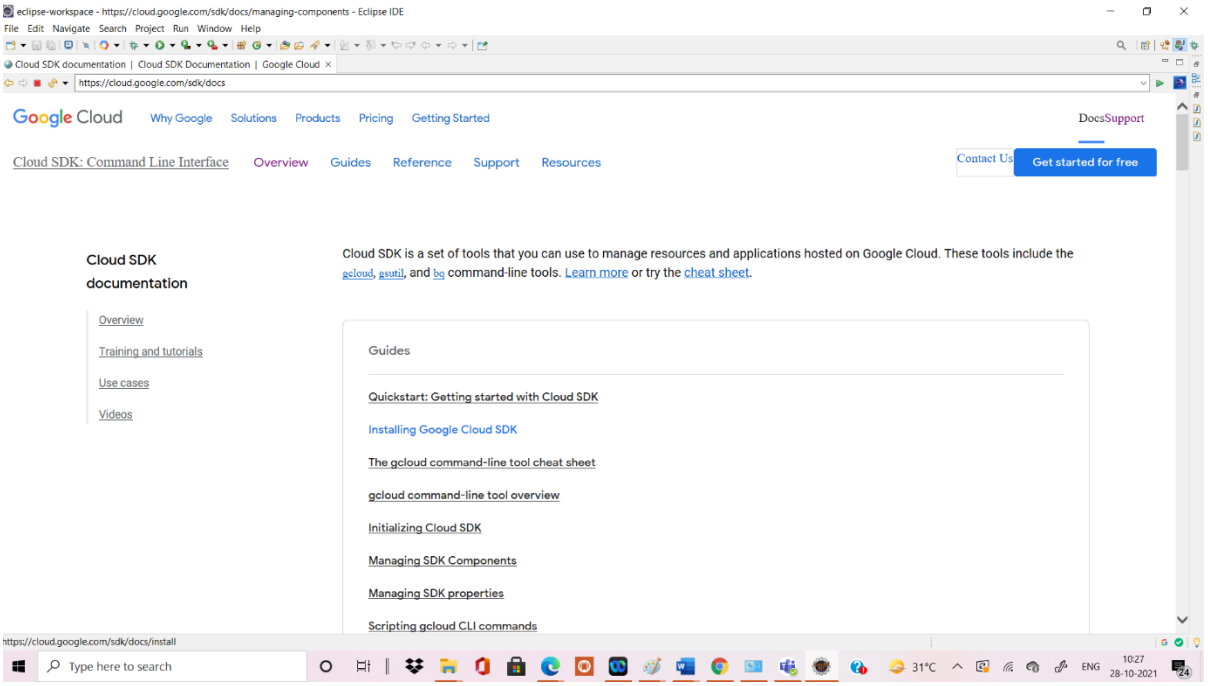
Click on below click

Link: https://cloud.google.com/sdk/docs/components

Below screen will appear

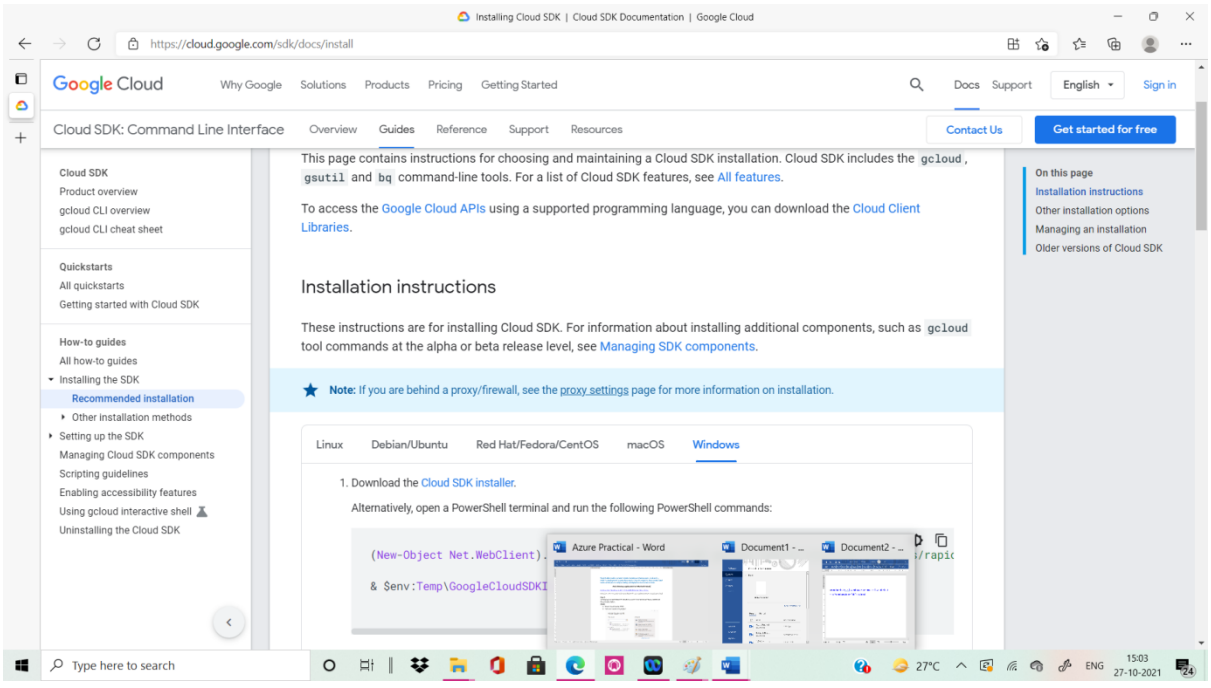


Click on installing Google Cloud SDK

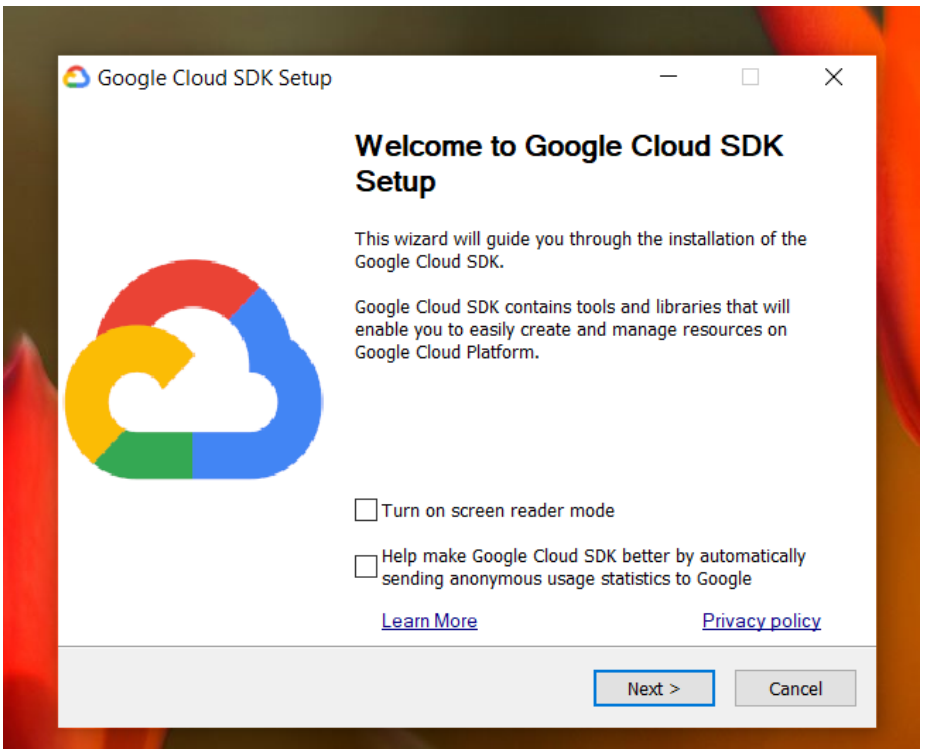


2.[Installing Cloud SDK | Cloud SDK Documentation | Google Cloud

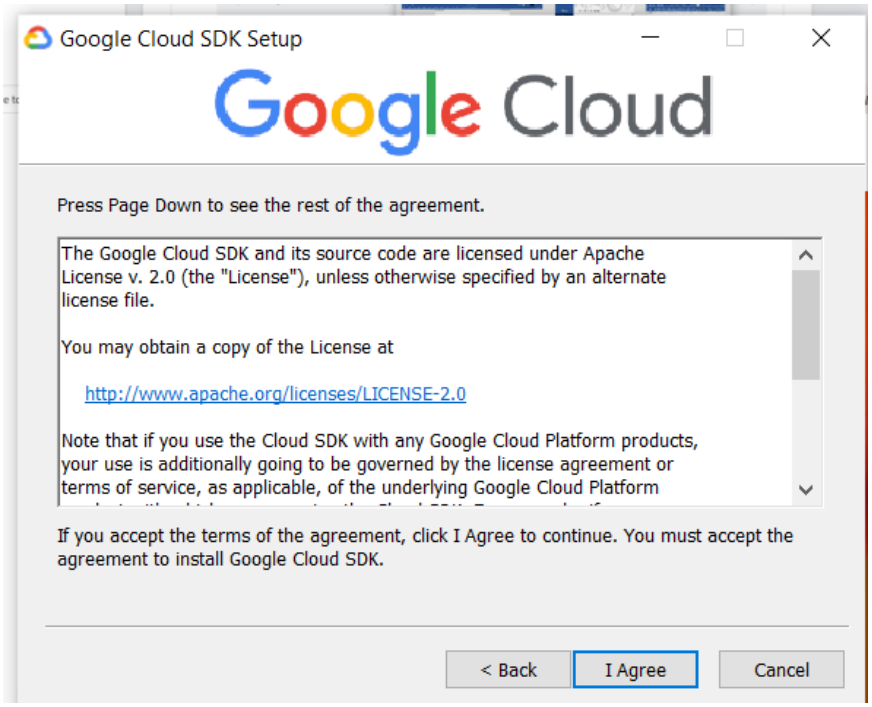
https://cloud.google.com/sdk/docs/install](https://cloud.google.com/sdk/docs/install)



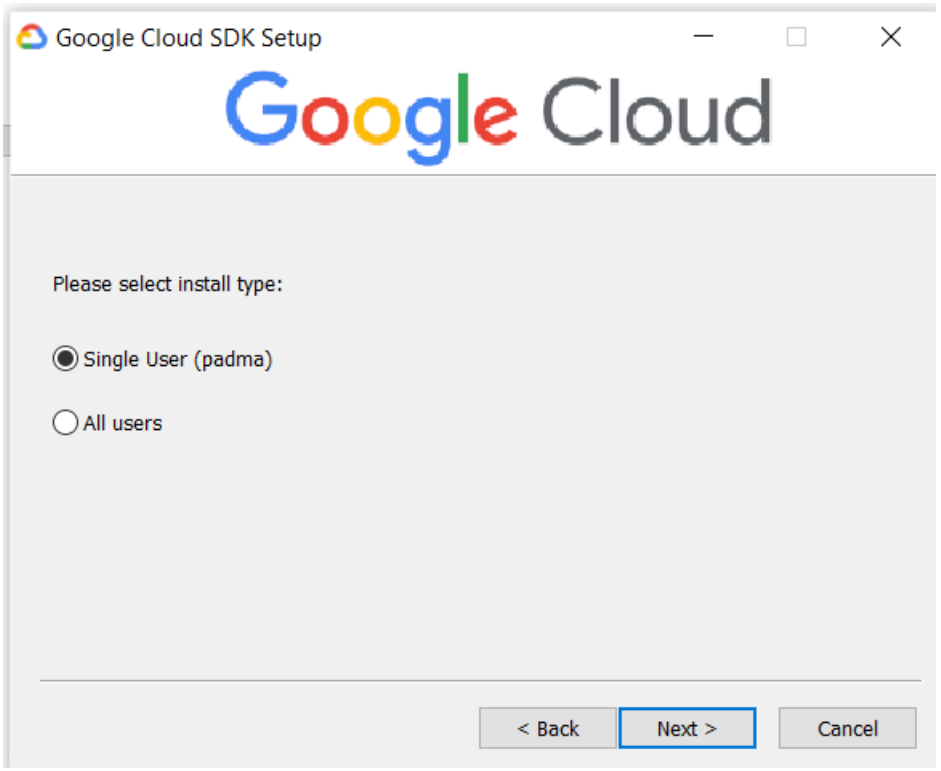
3.

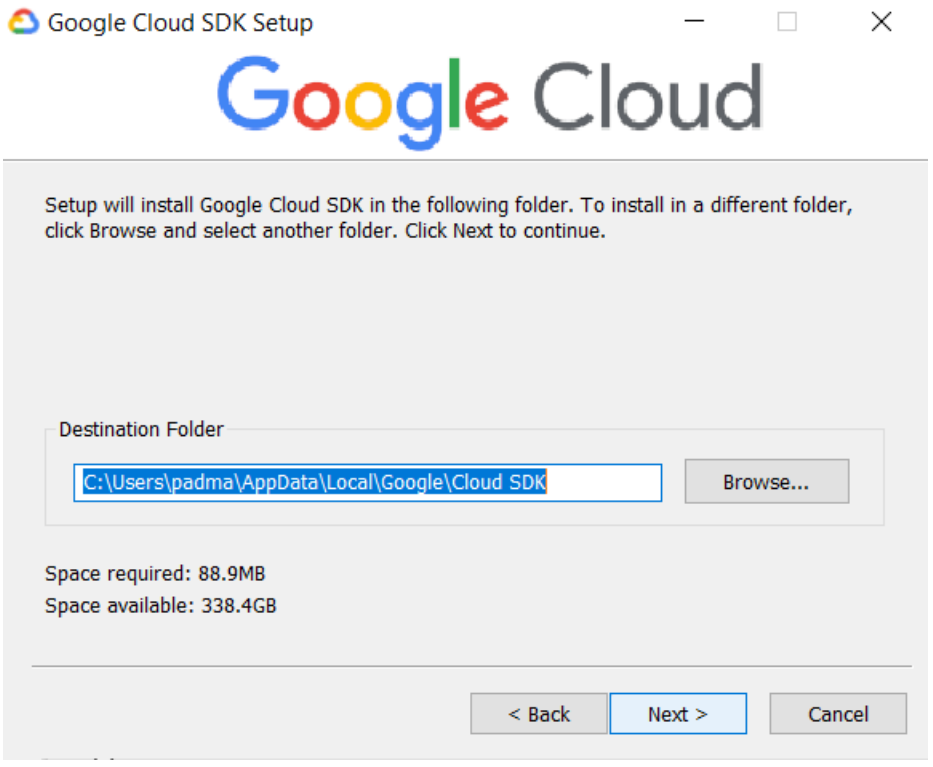

Google Cloud SDK Setup
Welcome to Google Cloud SDK Setup
This wizard will guide you through the installation of the Google Cloud SDK.
Google Cloud SDK contains tools and libraries that will enable you to easily create and manage resources on Google Cloud Platform.
Turn on screen reader mode
Help make Google Cloud SDK better by automatically sending anonymous usage statistics to Google
Learn More
Privacy policy
Next >
Cancel

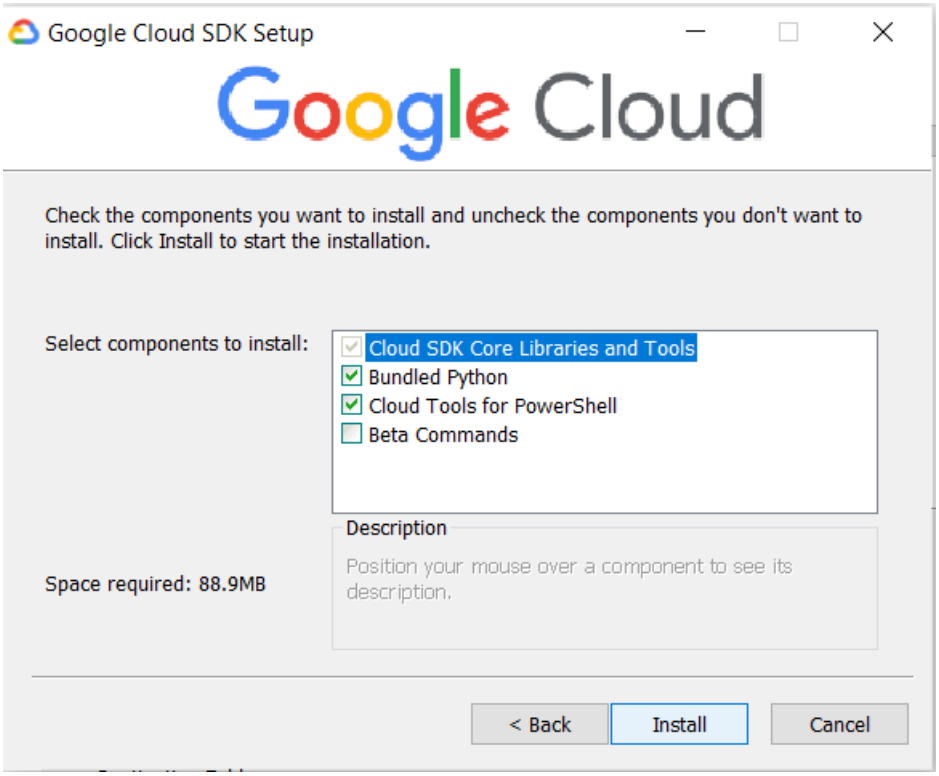
4

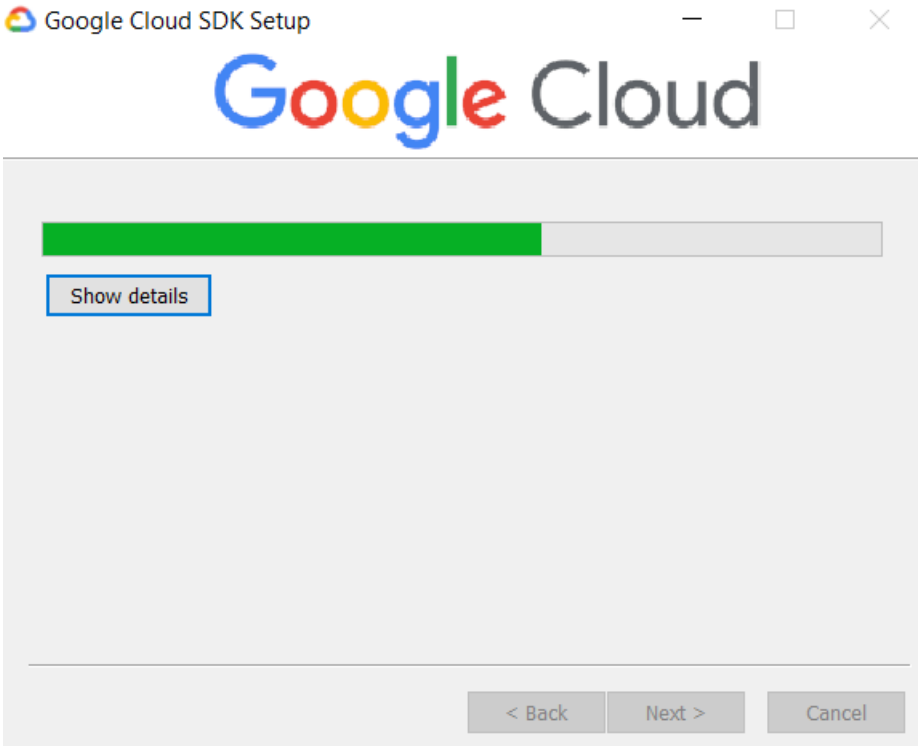

Google Cloud SDK Setup
Google Cloud
Press Page Down to see the rest of the agreement.
The Google Cloud SDK and its source code are licensed under Apache License v. 2.0 (the "License"), unless otherwise specified by an alternate license file.
You may obtain a copy of the License at
http://www.apache.org/licenses/LICENSE-2.0
Note that if you use the Cloud SDK with any Google Cloud Platform products, your use is additionally going to be governed by the license agreement or terms of service, as applicable, of the underlying Google Cloud Platform
If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install Google Cloud SDK.
< Back
I Agree
Cancel

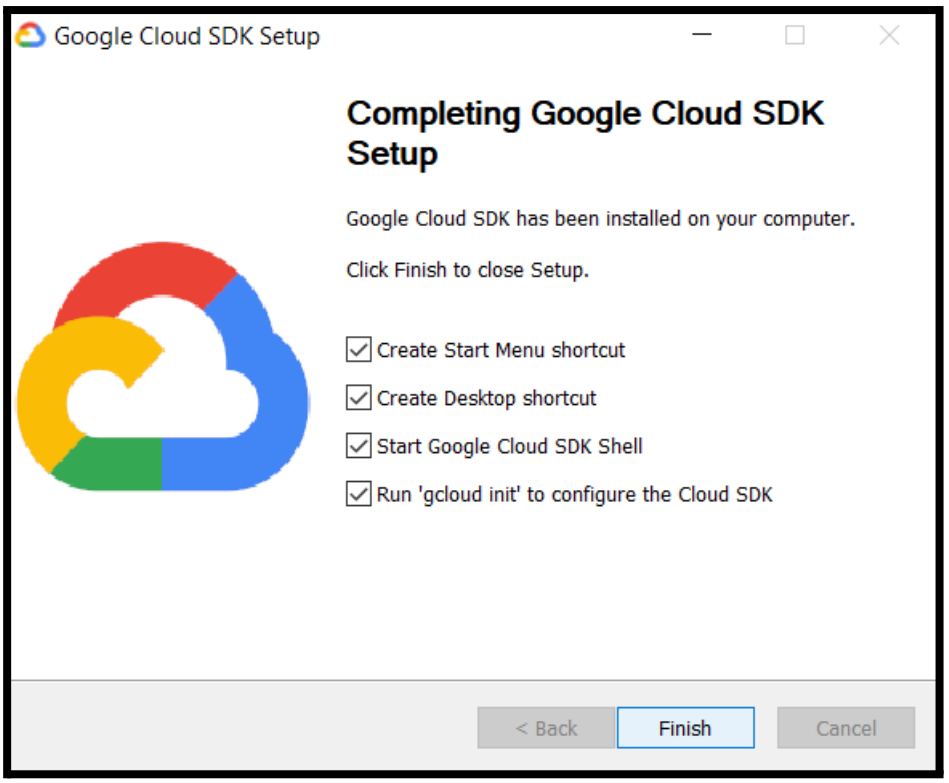
.


Google Cloud SDK Setup
Google Cloud
Please select install type:
Single User (padma)
All users
< Back
Next >
Cancel

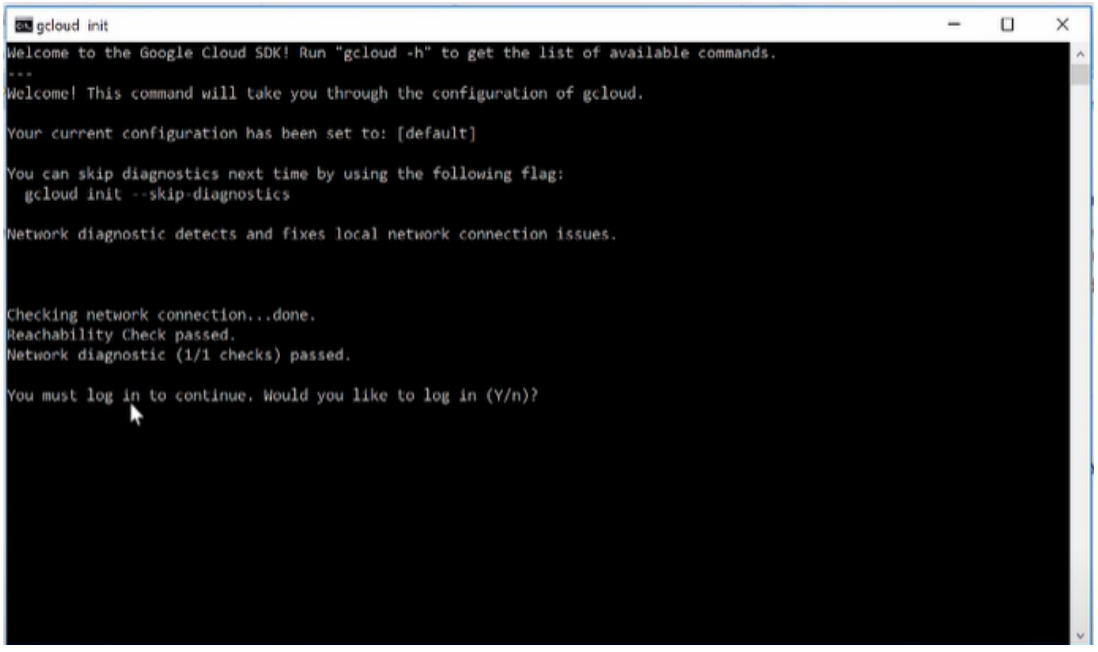

Google Cloud SDK Setup
Google Cloud
Setup will install Google Cloud SDK in the following folder. To install in a different folder, click Browse and select another folder. Click Next to continue.
Destination Folder
C:\Users\padma\AppData\Local\Google\Cloud SDK
Browse...
Space required: 88.9MB
Space available: 338.4GB
< Back
Next >
Cancel


Google Cloud SDK Setup
Google Cloud
Check the components you want to install and uncheck the components you don't want to install. Click Install to start the installation.
Select components to install:
Cloud SDK Core Libraries and Tools
Bundled Python
Cloud Tools for PowerShell
Beta Commands
Description
Position your mouse over a component to see its description.
Space required: 88.9MB
< Back
Install
Cancel

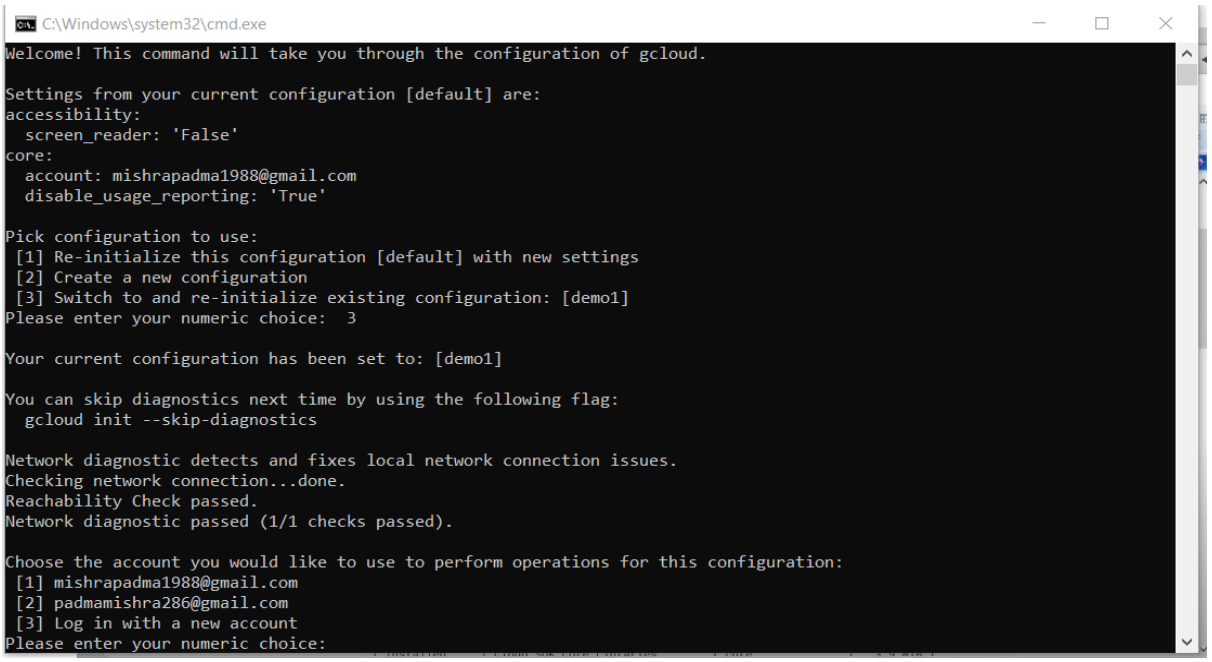

Google Cloud SDK Setup
Google Cloud
Show details
< Back
Next >
Cancel

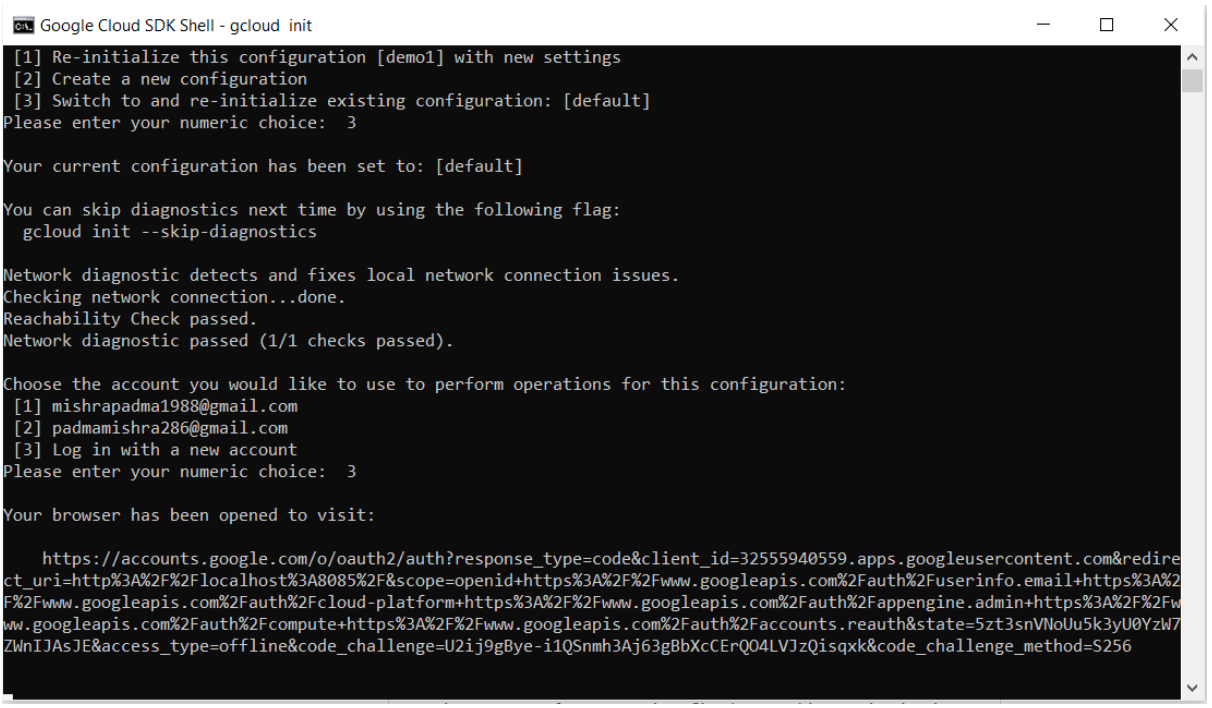


Below gcloud init Command Prompt will appear

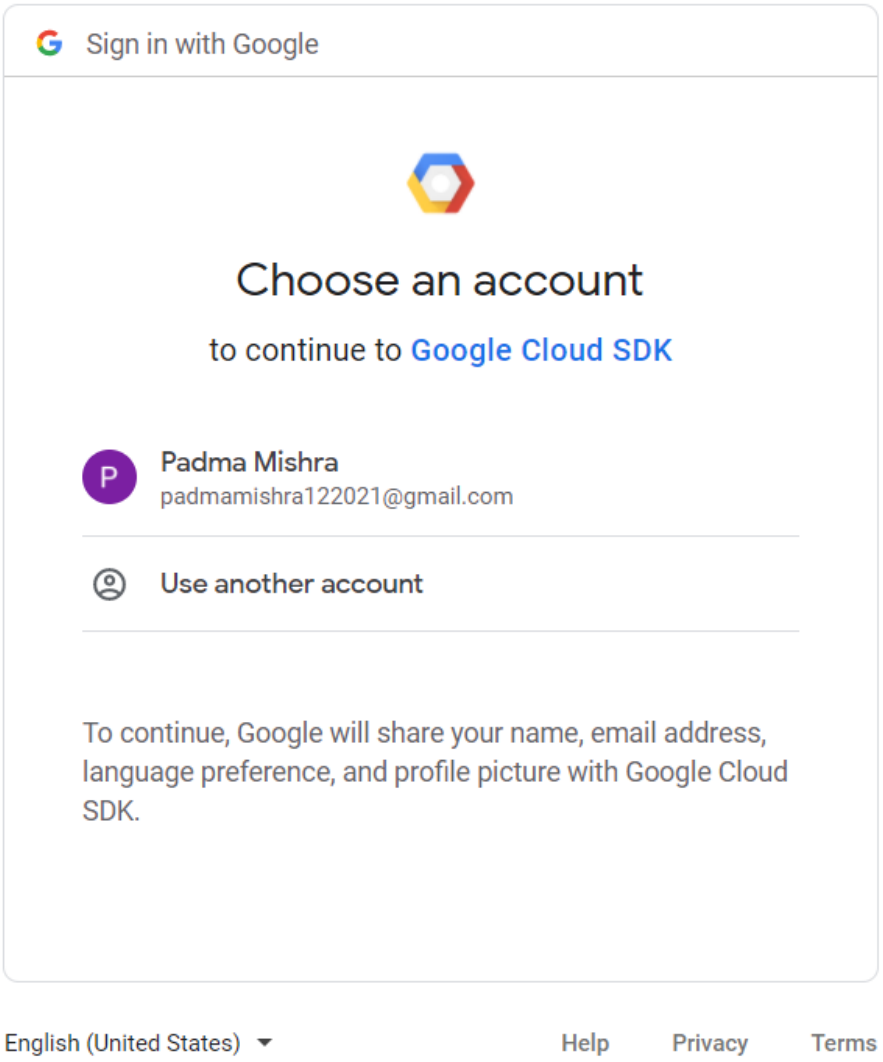


Choose the **option Log in with a new account**



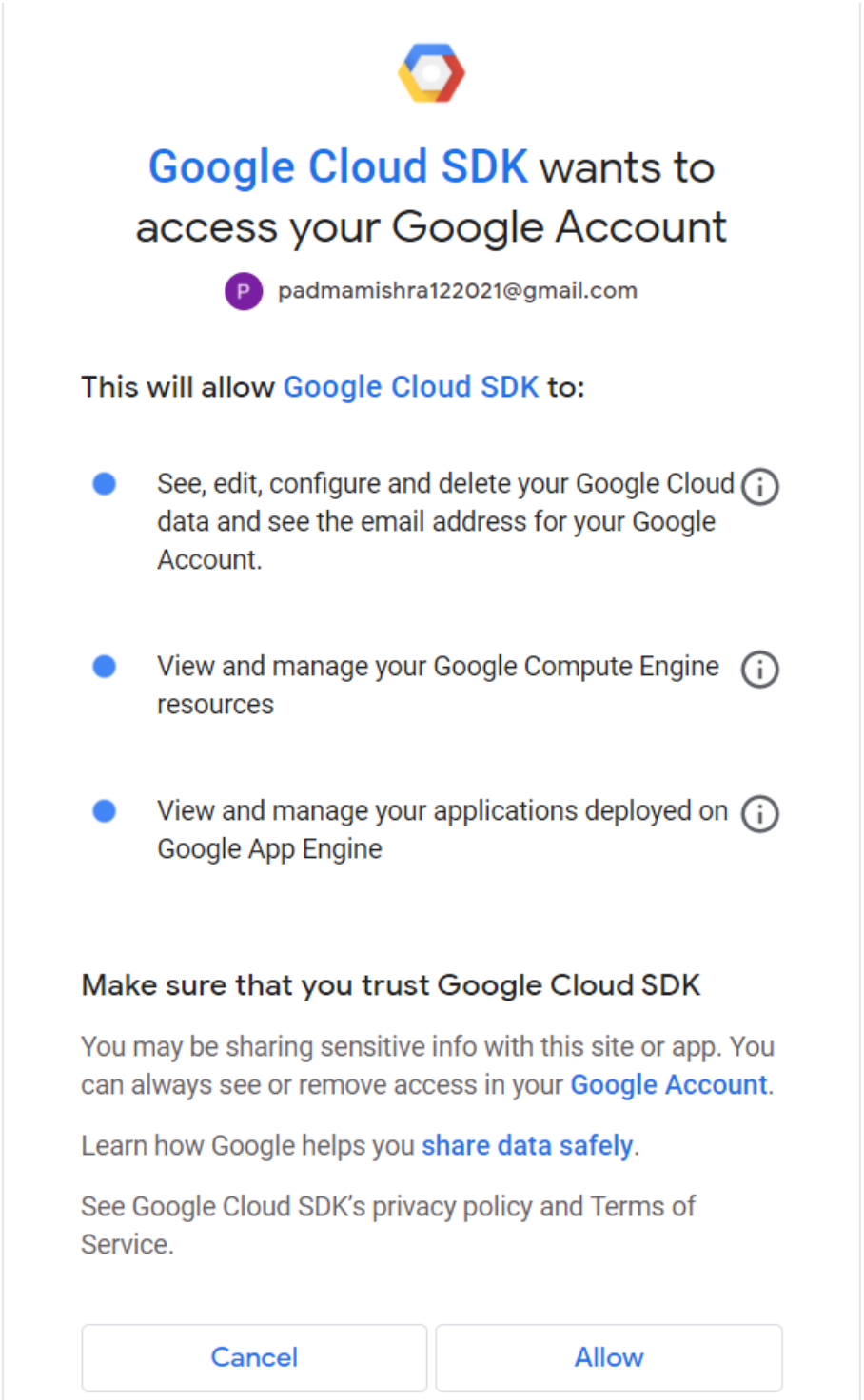


Once you choose **options Login with a new account** **below screen will appear** **sign in with Google**

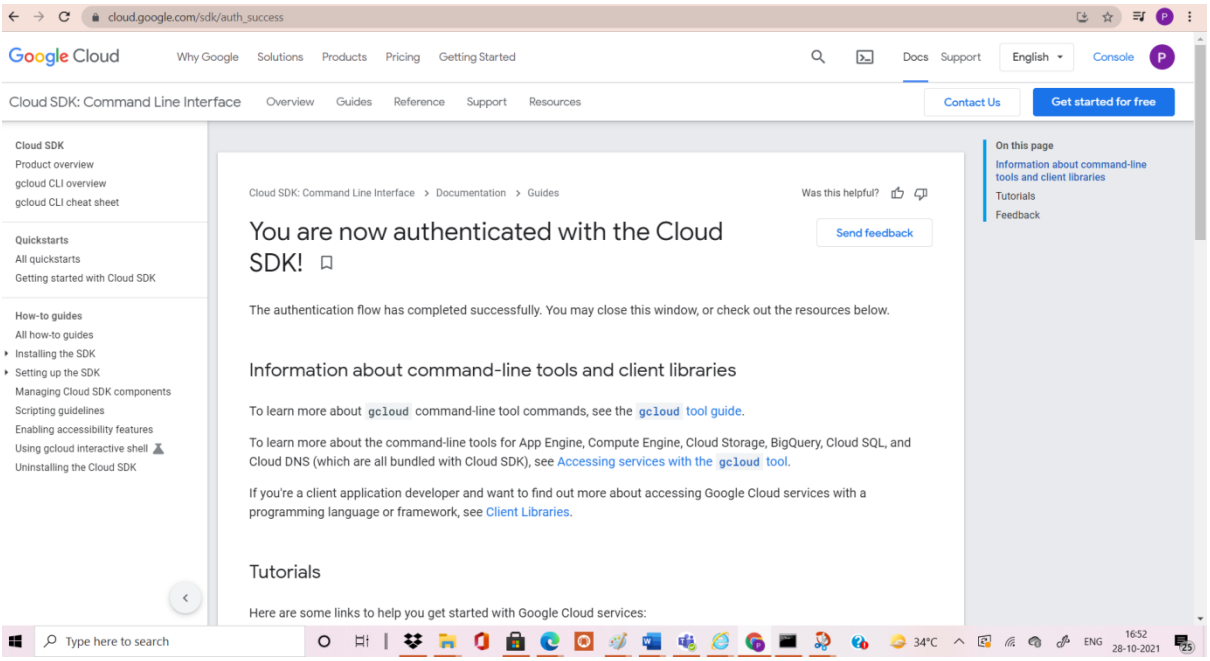


Choose a Gmail Account which you want to continue with then below screen will appear.

Then **Click -> Allow**

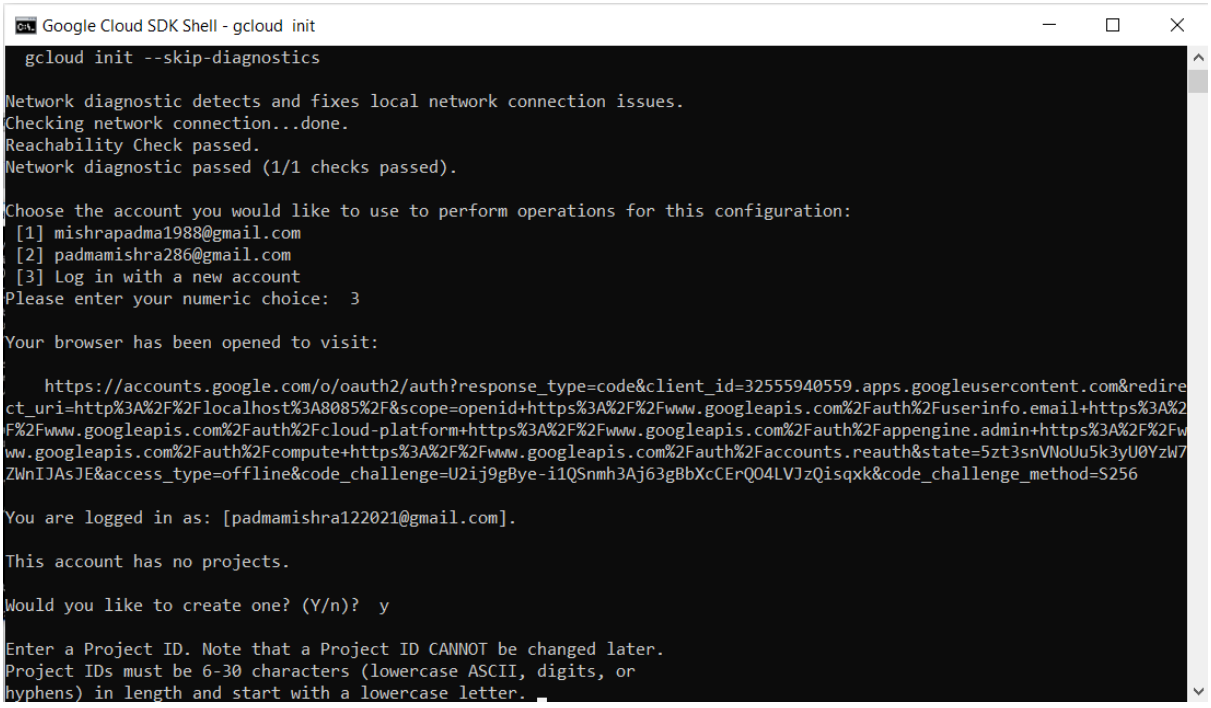


Below Screen will appear you are now authenticated with the cloud SDK!



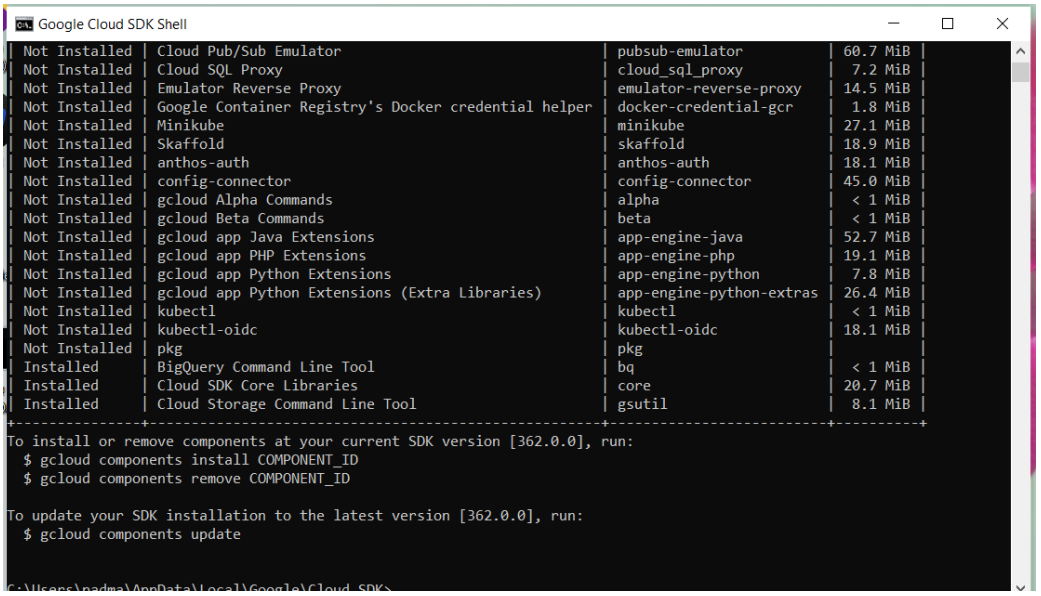
Below screen will appear

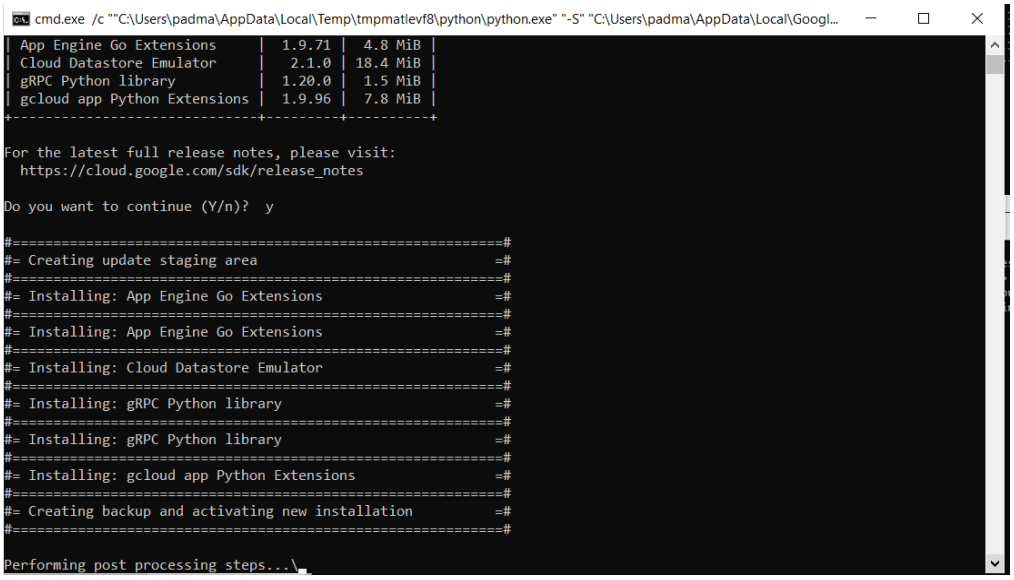
1. It will show list of project in your account **if you receive the message this account has no projects.**
2. **Then create new projects**

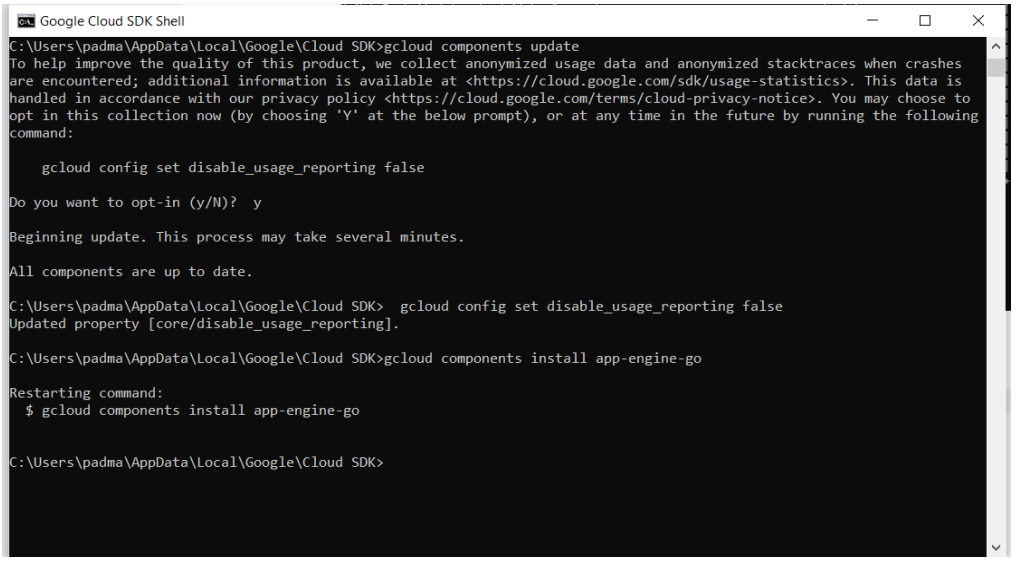


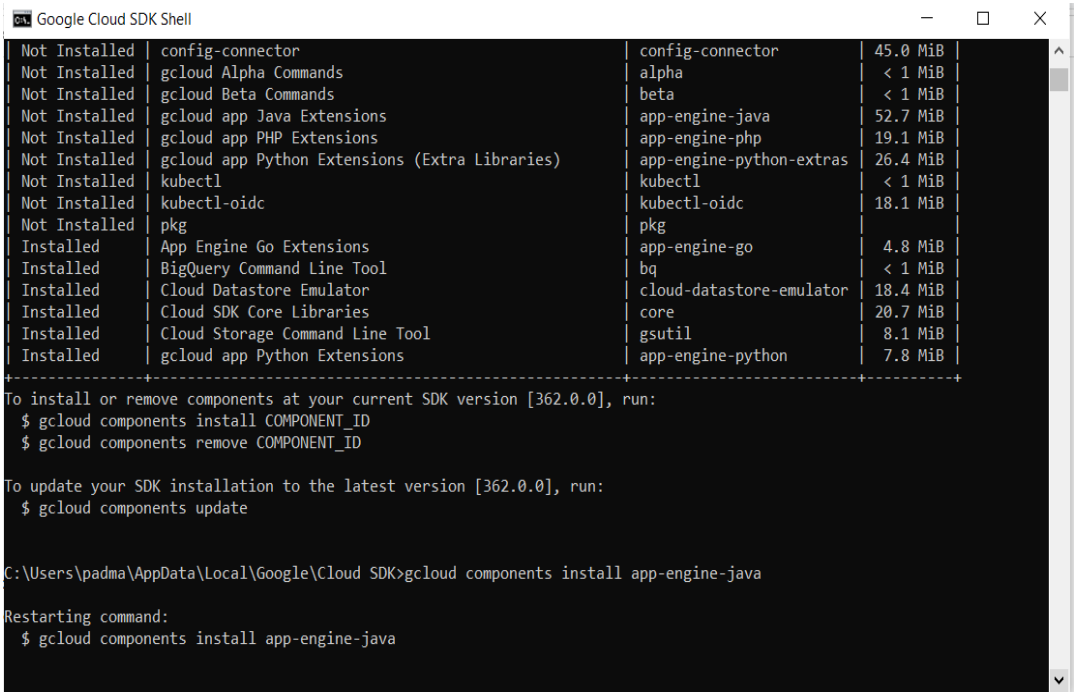
To update your SDK Installation to the lastest version below command need to run

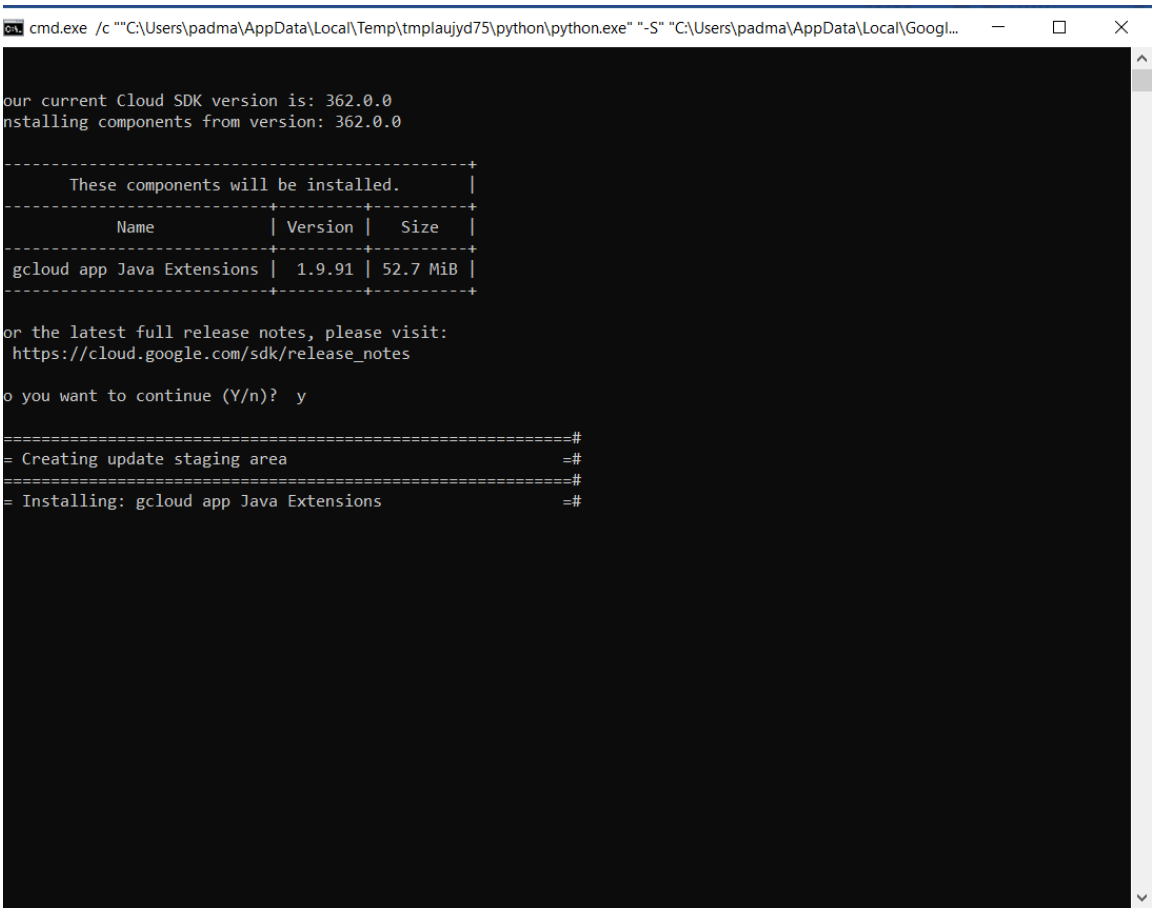
$ **gcloud components update;**






Google Cloud SDK Shell
C:\Users\padma\AppData\Local\Google\Cloud SDK>gcloud components update
To help improve the quality of this product, we collect anonymized usage data and anonymized stacktraces when crashes are encountered; additional information is available at <https://cloud.google.com/sdk/usage-statistics>. This data is handled in accordance with our privacy policy <https://cloud.google.com/terms/cloud-privacy-notice>. You may choose to opt in this collection now (by choosing 'Y' at the below prompt), or at any time in the future by running the following command:
gcloud config set disable_usage_reporting false
Do you want to opt-in (y/N)? y
Beginning update. This process may take several minutes.
All components are up to date.
C:\Users\padma\AppData\Local\Google\Cloud SDK> gcloud config set disable_usage_reporting false
Updated property [core/disable_usage_reporting].
C:\Users\padma\AppData\Local\Google\Cloud SDK>gcloud components install app-engine-go
Restarting command:
$ gcloud components install app-engine-go
C:\Users\padma\AppData\Local\Google\Cloud SDK>

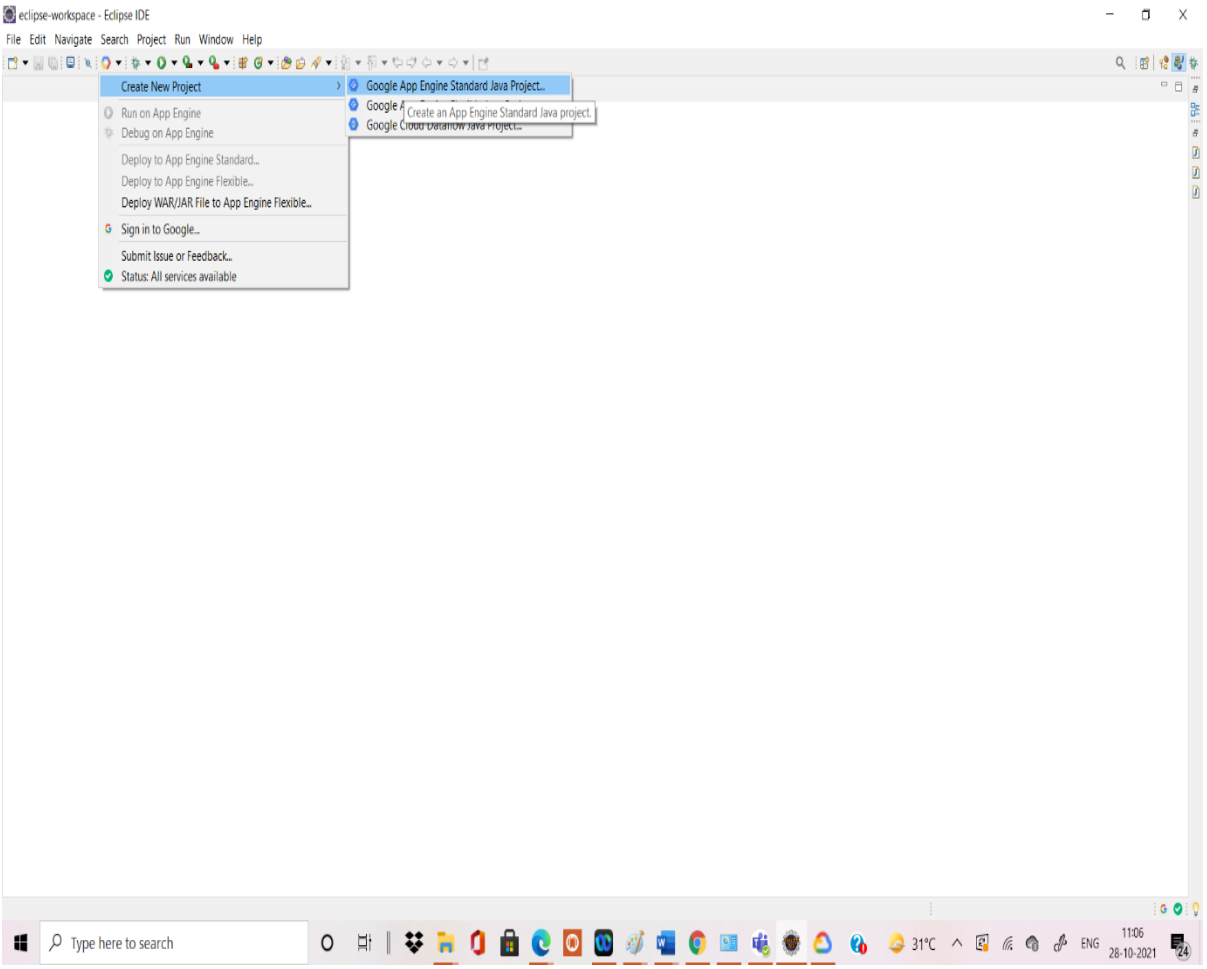




Close the command prompt

Step 3

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



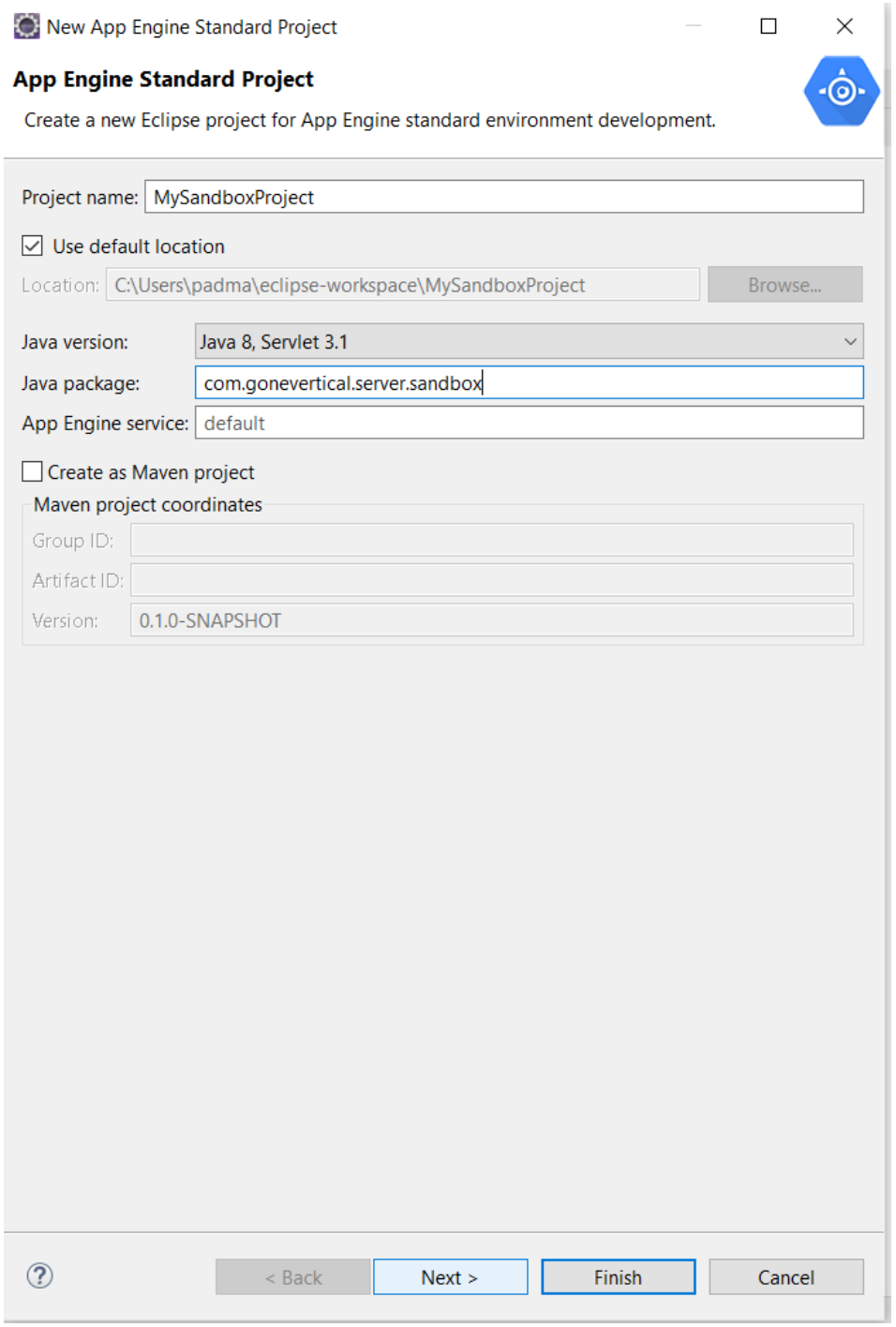
Below screen will appear New App Engine Standard Project

Provide the Project Name & Java Package as mentioned below

Project Name: My SandboxProject

Java Package: com.gonevertical.server.sandbox

Click on Next



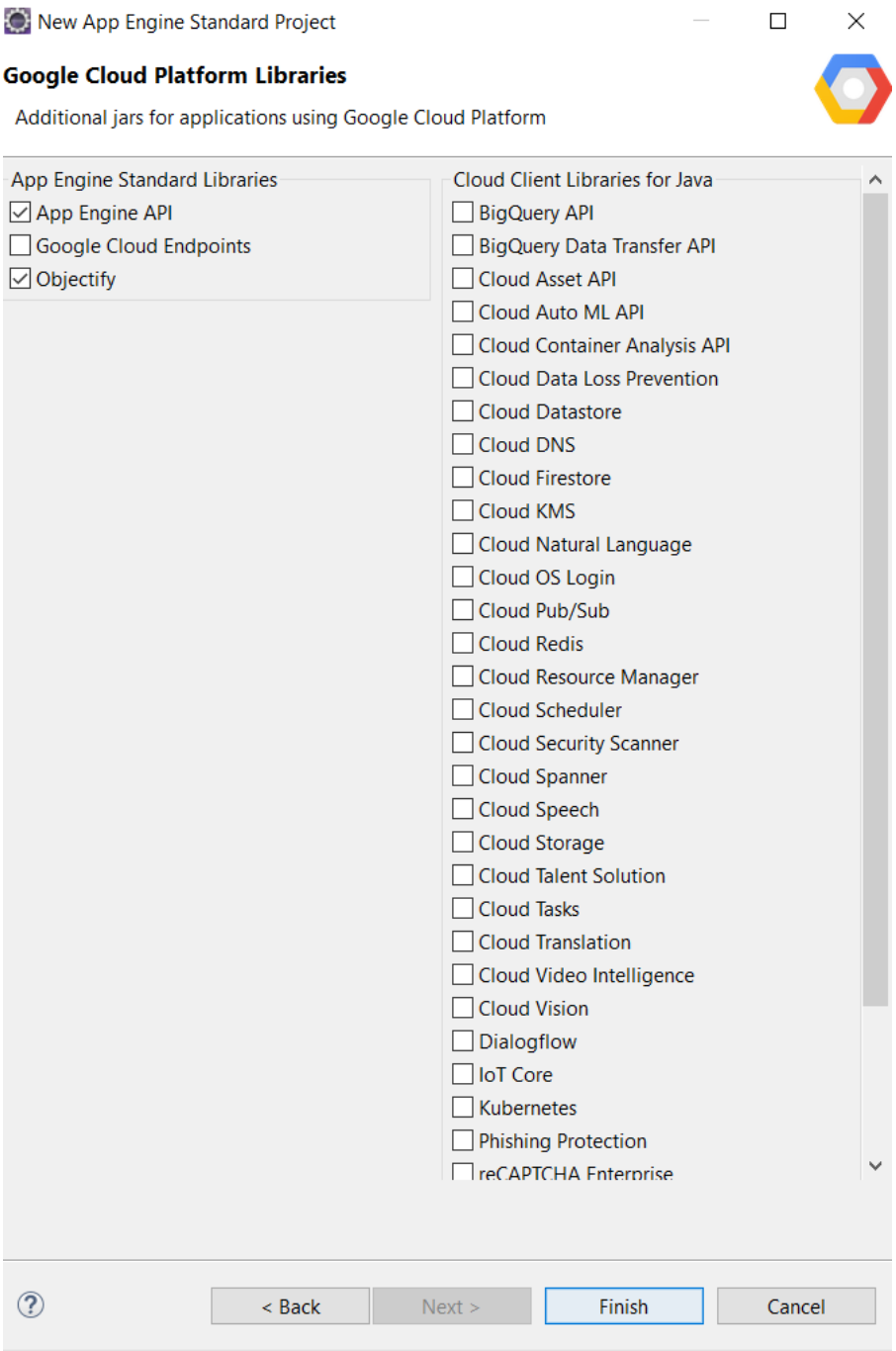
Below screen will appear

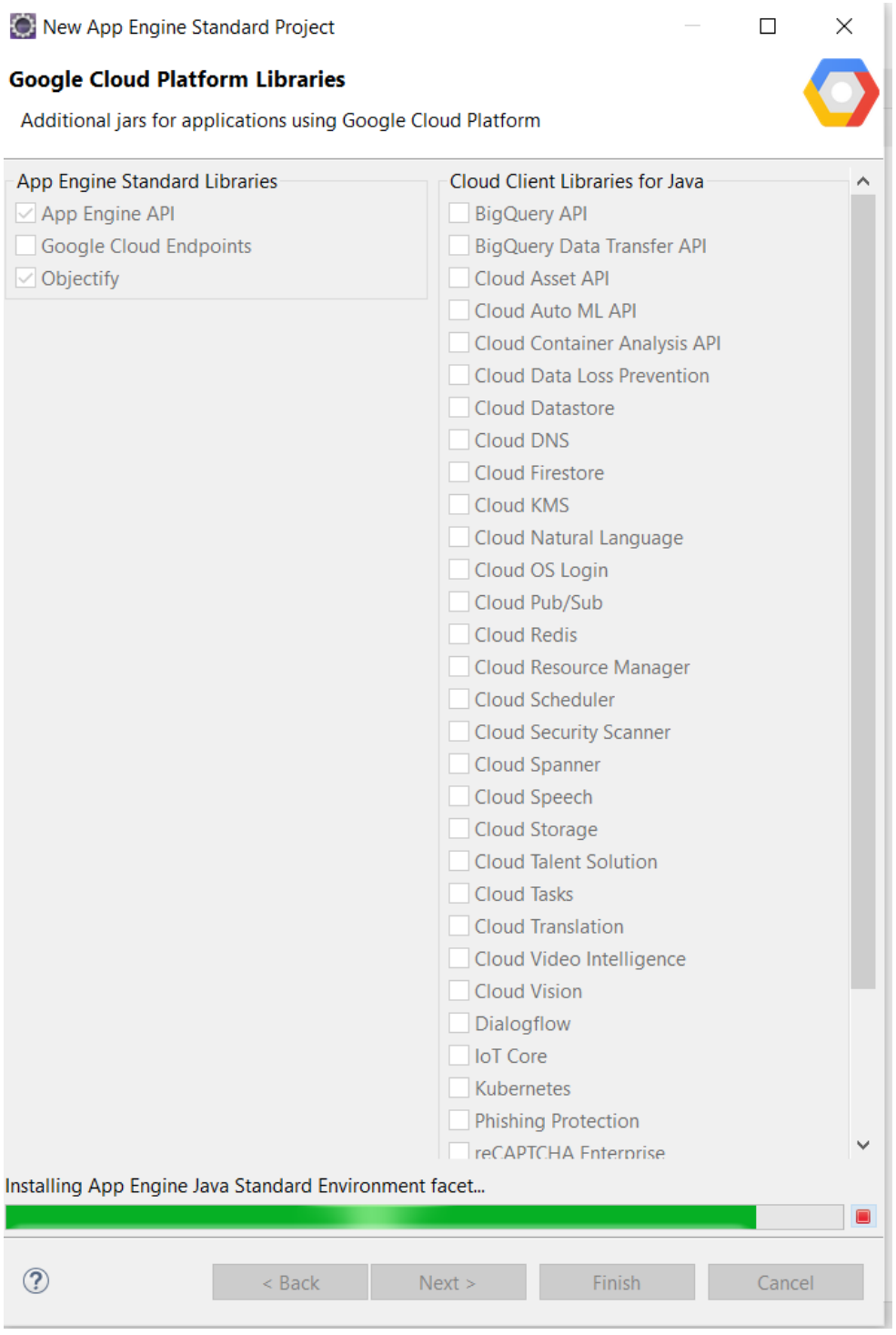
FROM App Engine Standard Libraries

Select 1.App Engine API

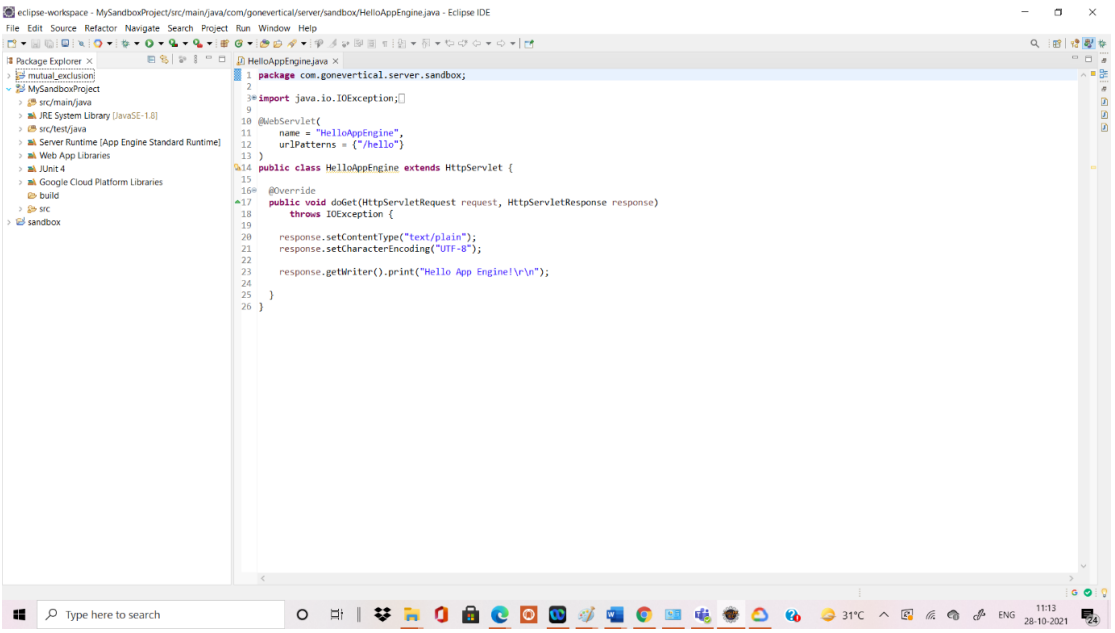
Select 2.Objectify

3.Click on Finish

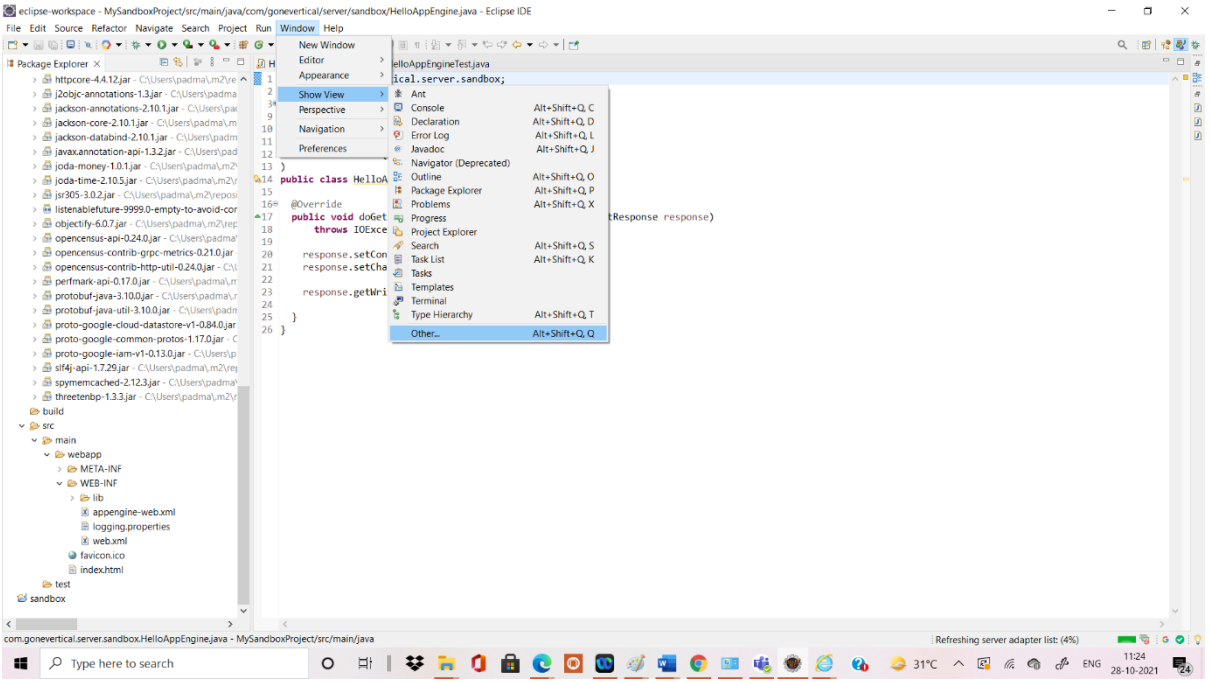

New App Engine Standard Project
Google Cloud Platform Libraries
Additional jars for applications using Google Cloud Platform
App Engine Standard Libraries
App Engine API
Google Cloud Endpoints
Objectify
Cloud Client Libraries for Java
BigQuery API
BigQuery Data Transfer API
Cloud Asset API
Cloud Auto 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...
< Back
Next >
Finish
Cancel

Below Screen will Appear HelloAppEngine.Java

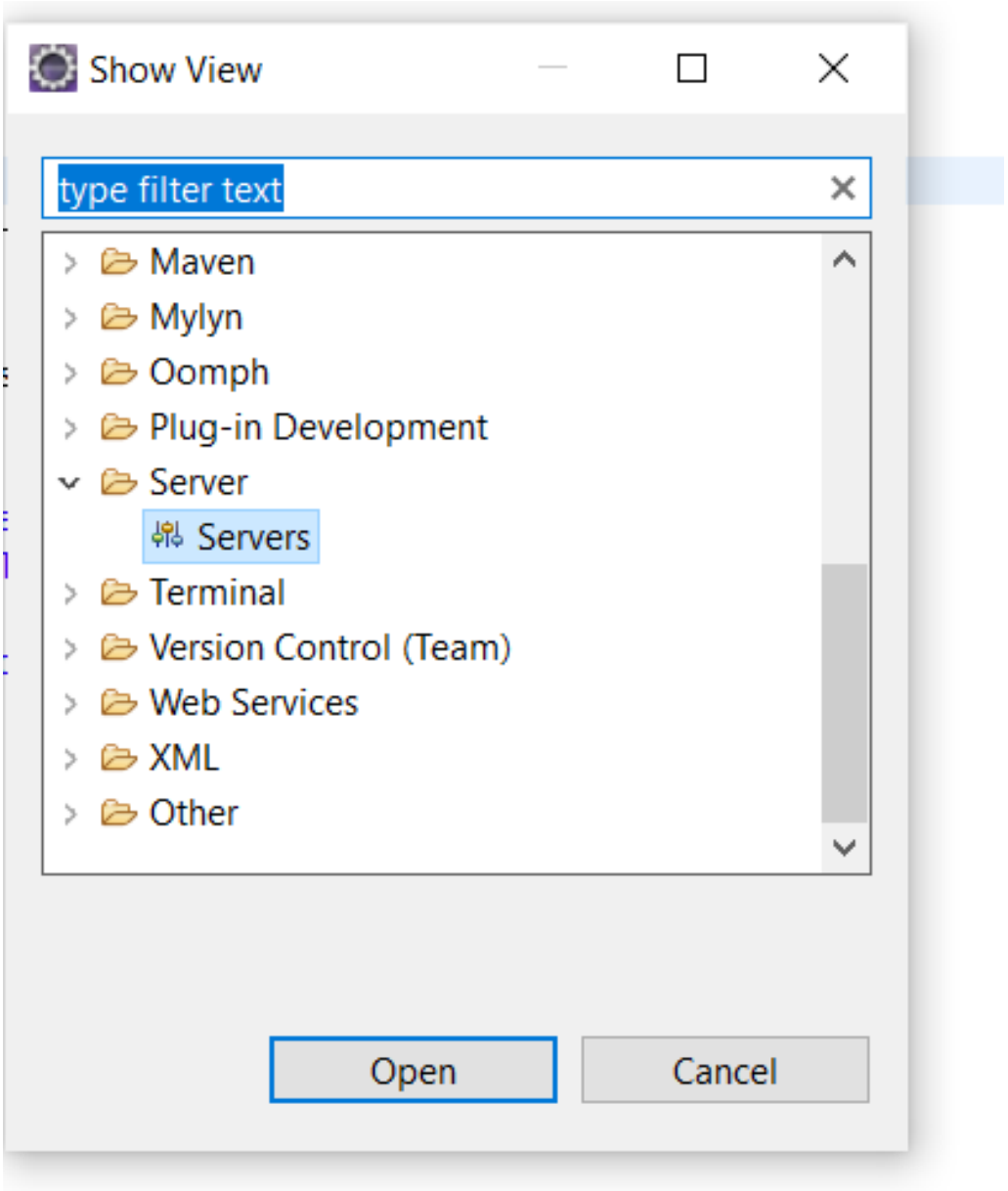


Go to Window->Show View->Other

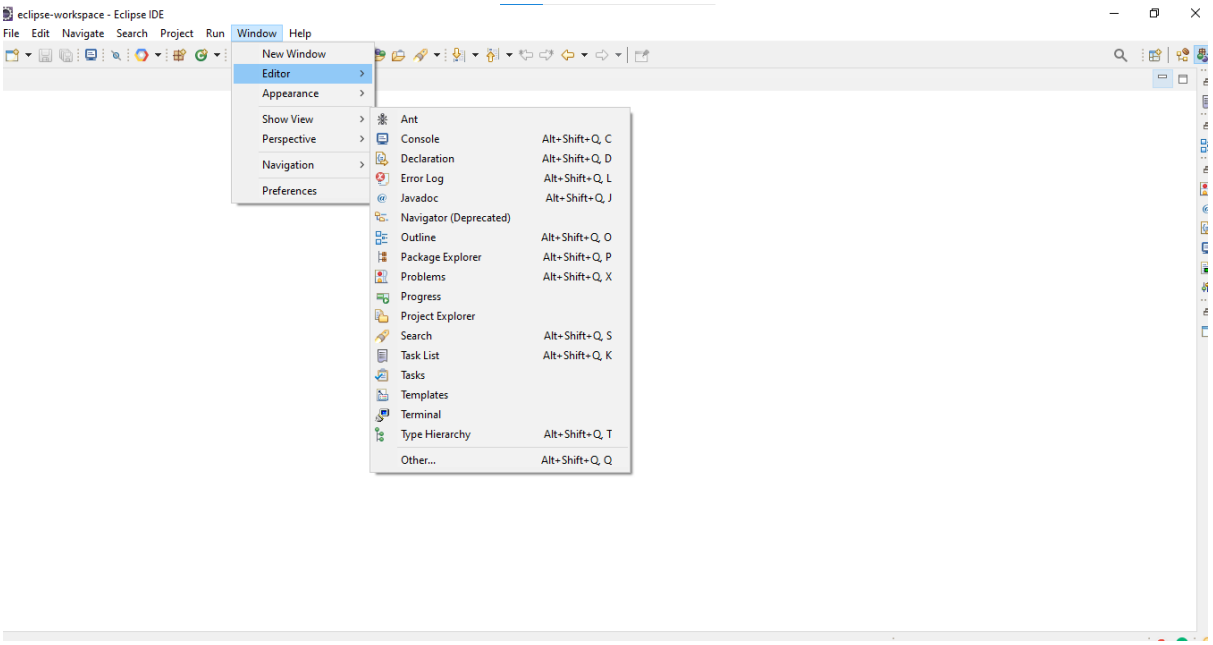


After clicking on other below Screen of Show View will appear

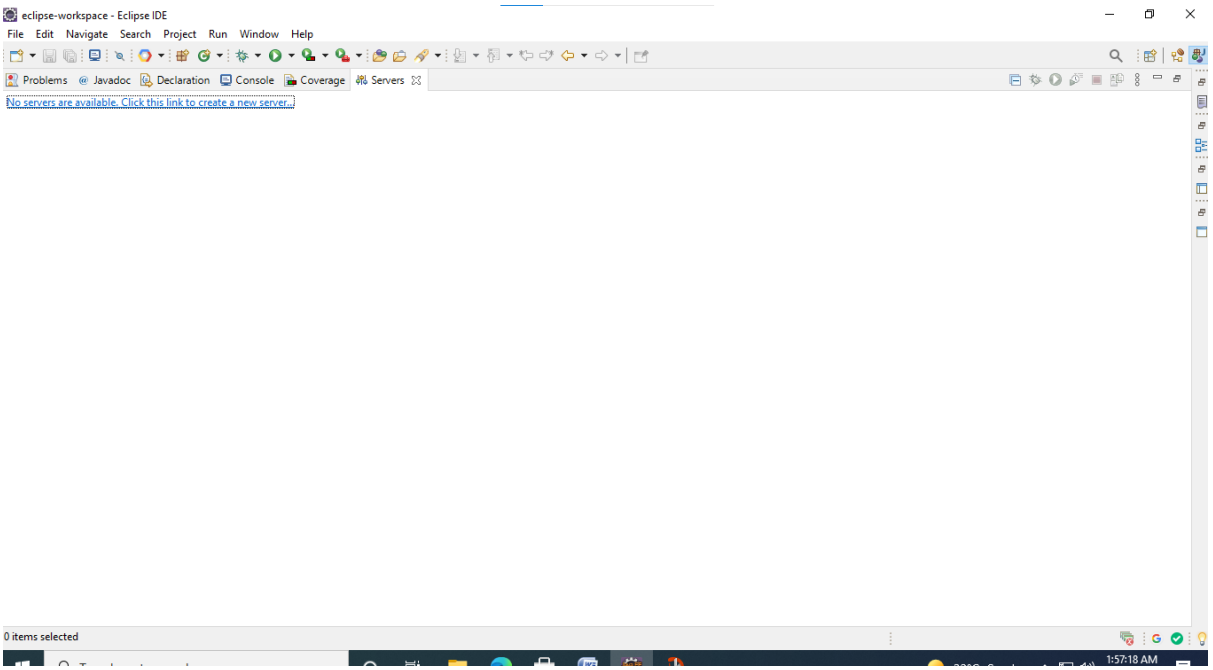
1. **Click on Server->Servers**
2. **Click on Open**



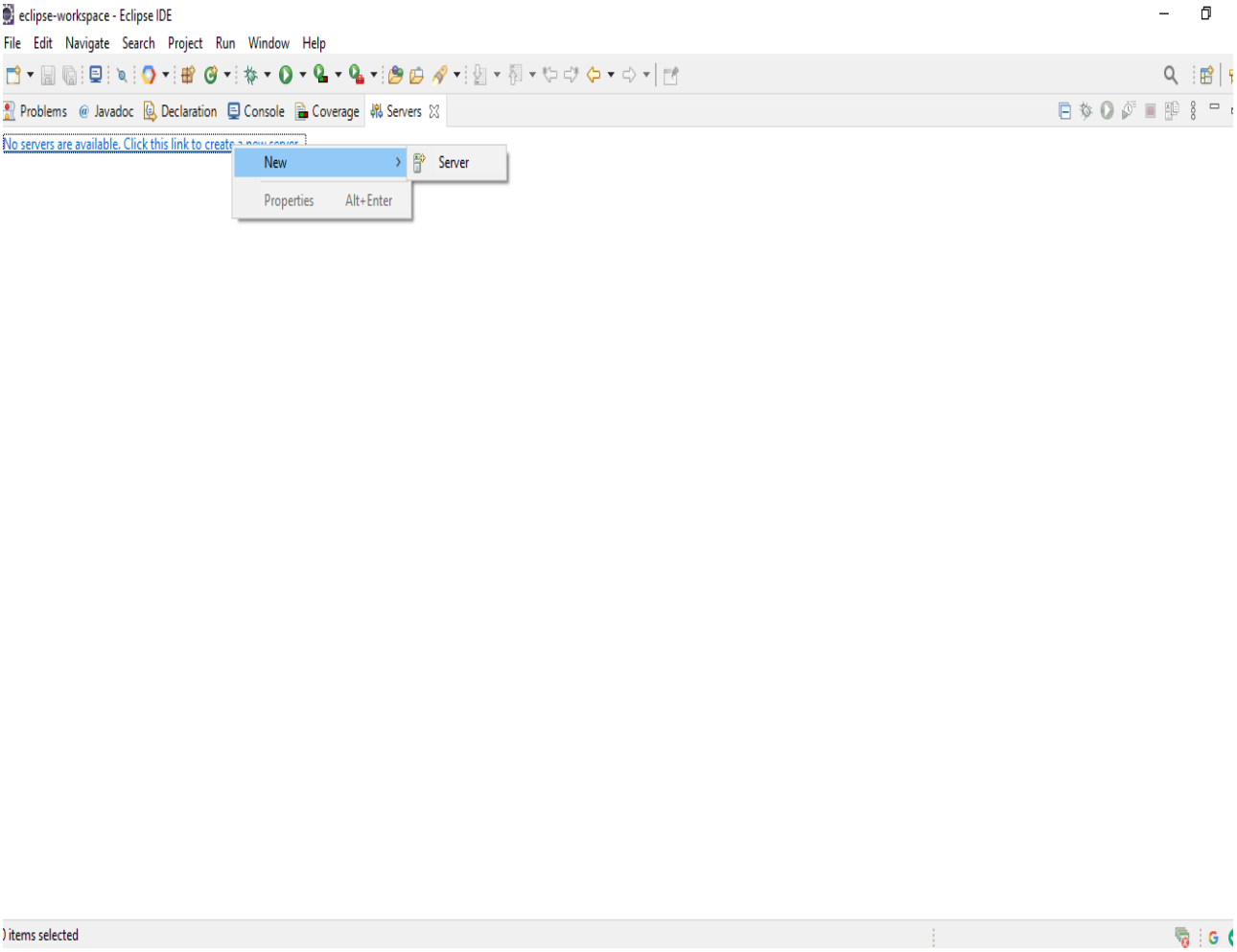
Click on Window->Editor->Console



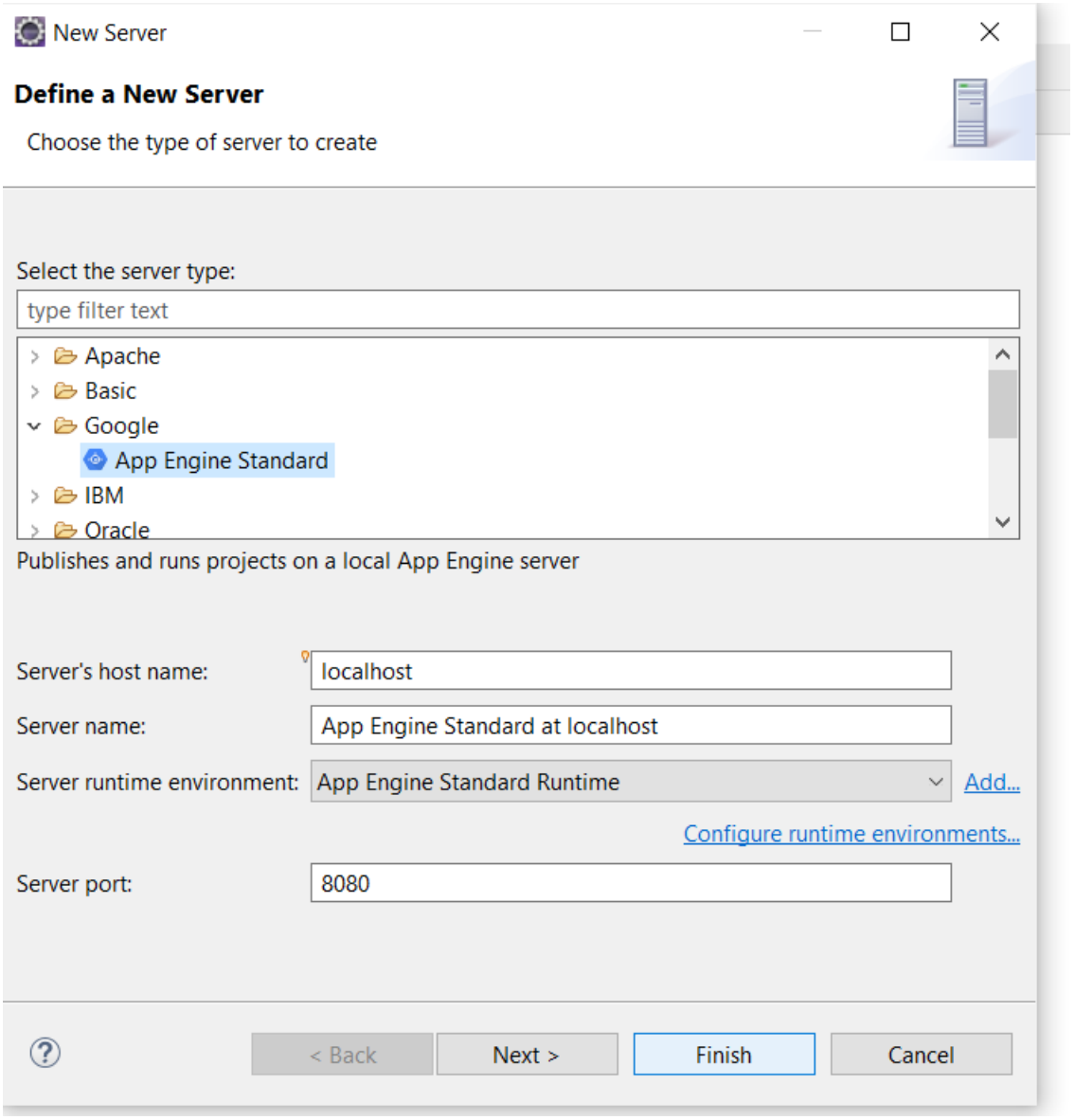
Once the **Console screen appear ->Click on Servers**



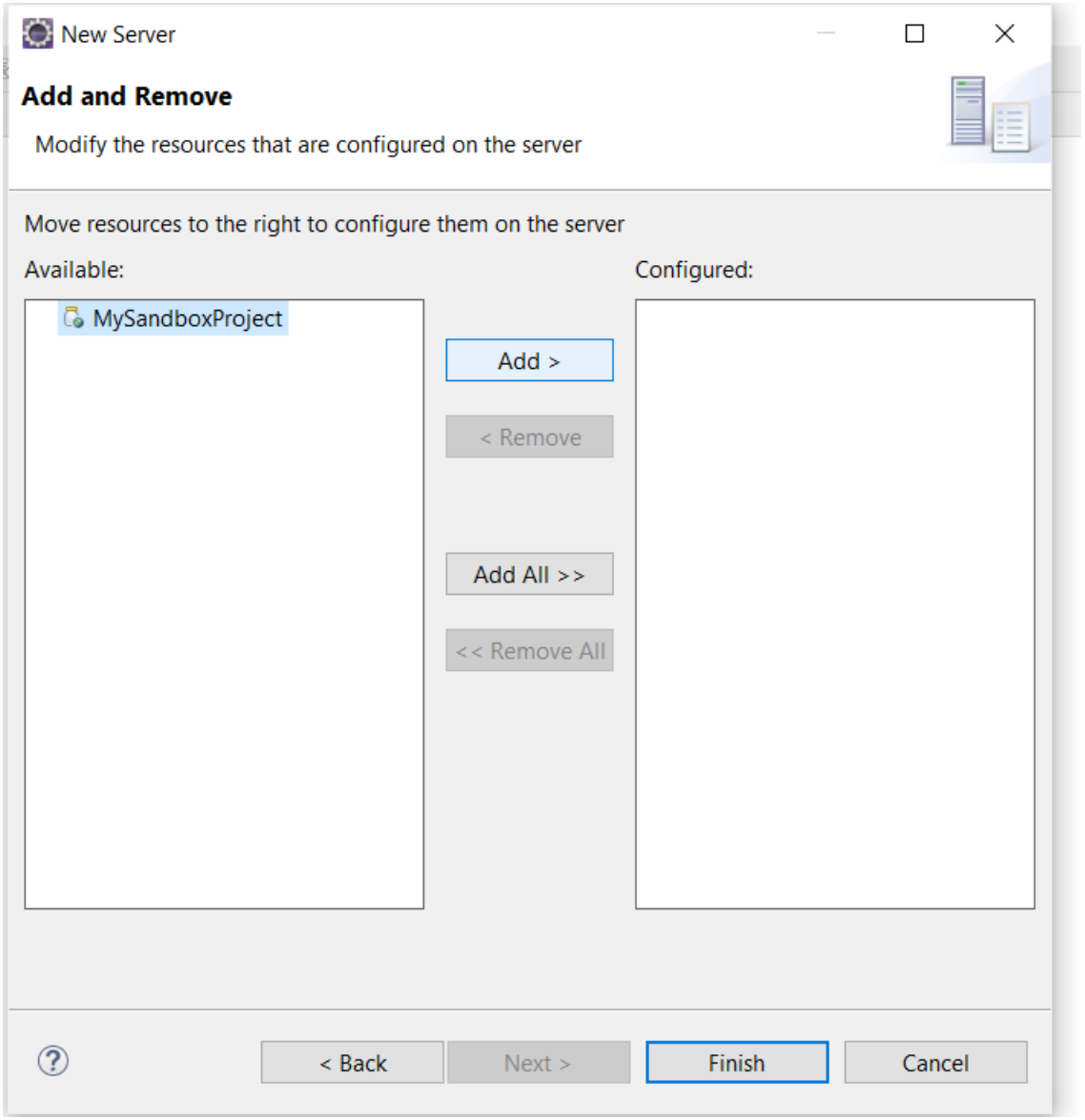
Right click on server ->New->Server



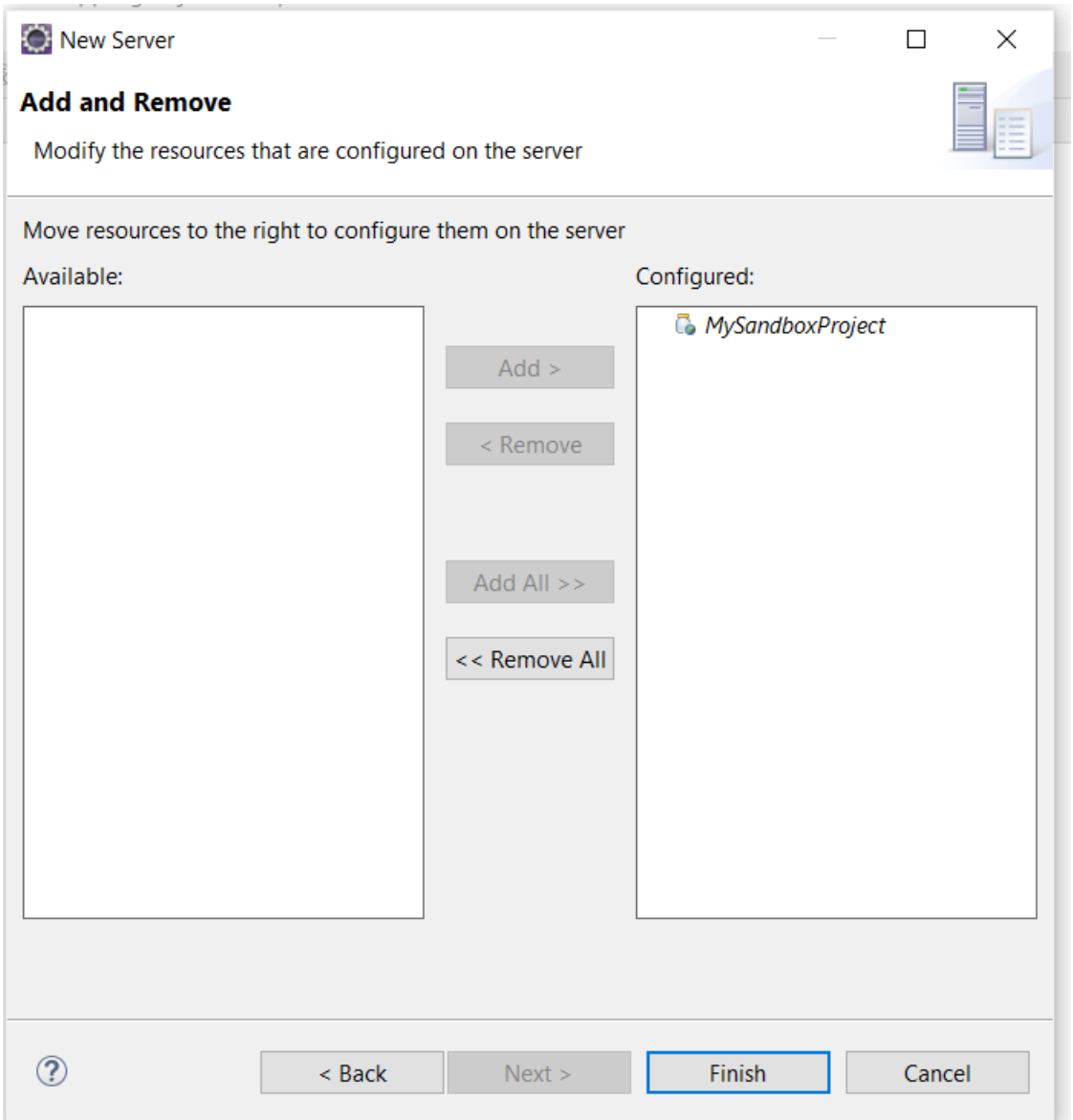
To define a new server will below screen appear 1. Select App Engine Standard 2.Click on Next 3.Click on Finish

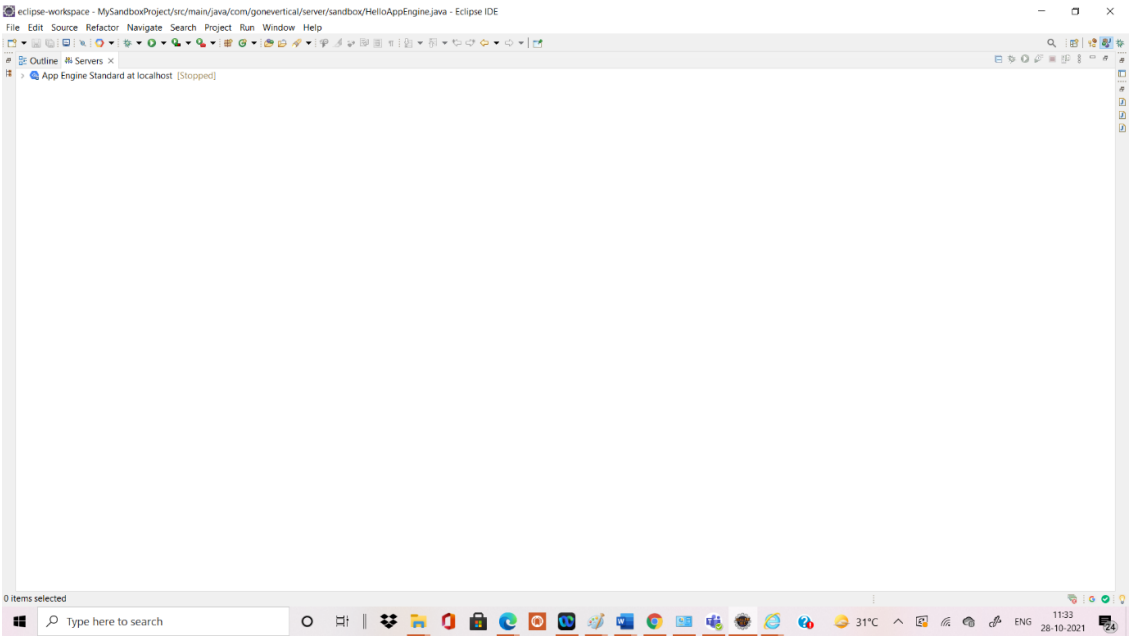


Select from Available Project: MySandboxProject and then click on Add Button

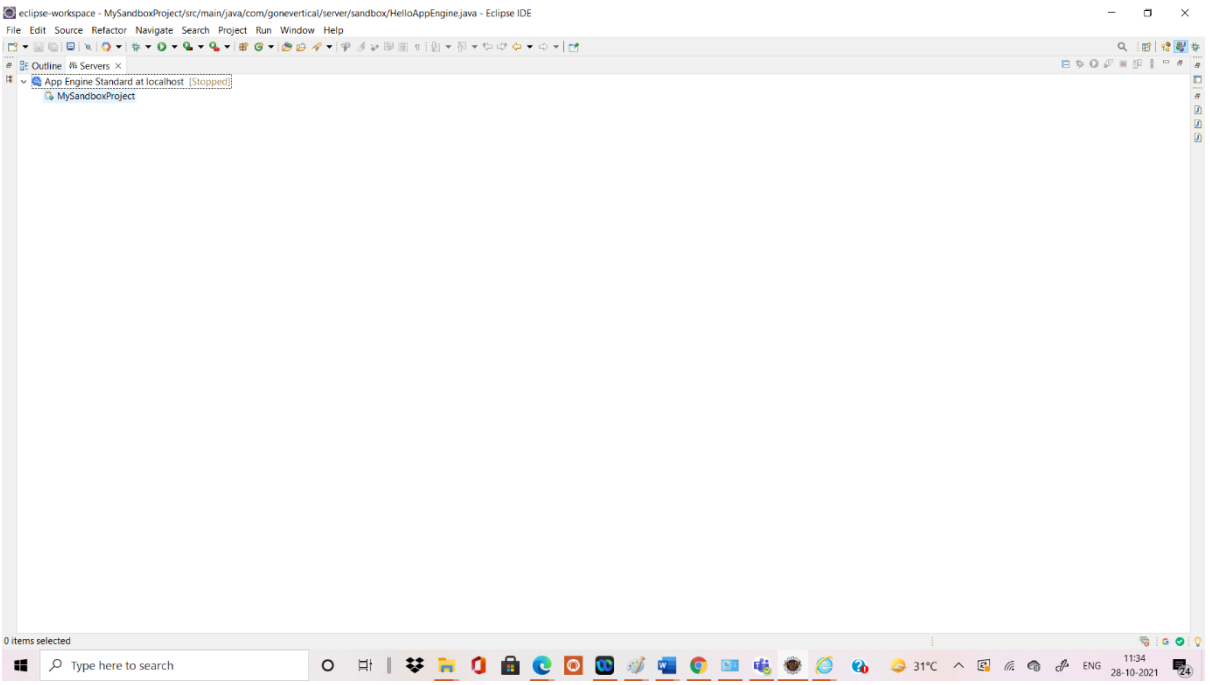


After adding MySandboxProject in Configured then Click on Finish Button

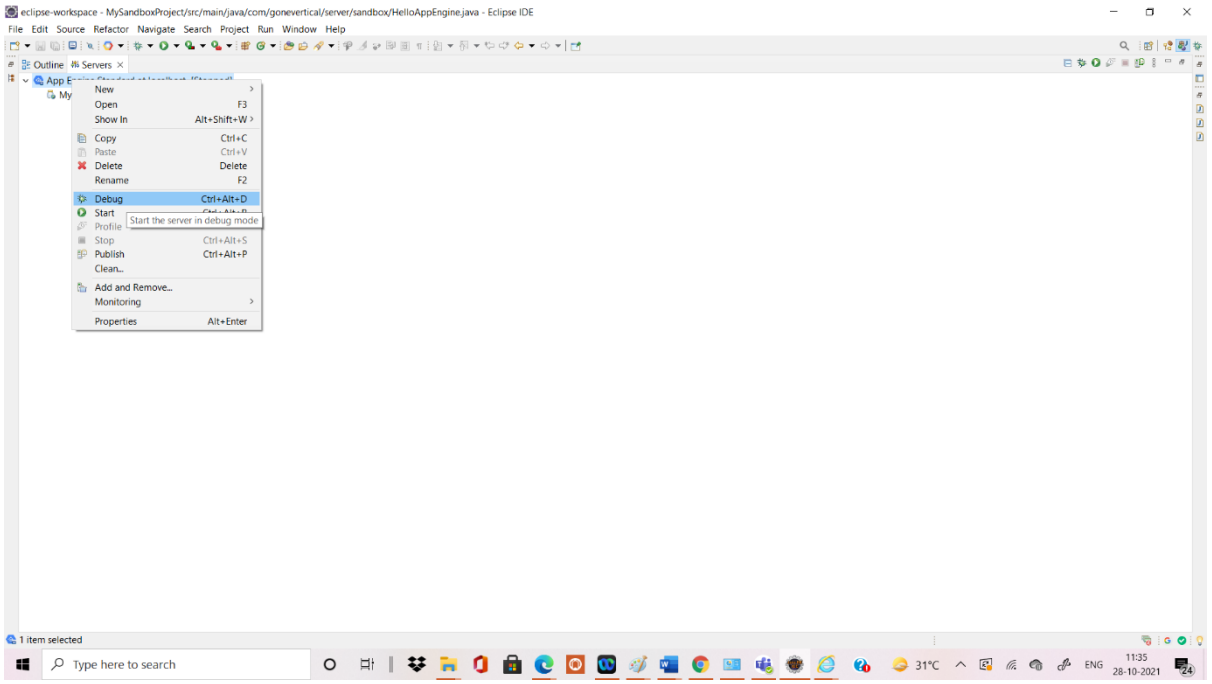




Click On App Engine Standard At localhost ->MySandboxProject



Right click on App Engine Standard At localhost->Click on Debug



Final Output Screen will appear