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Institute of Engineering & Management



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Week 2: STEP WISE INSTALLATION OF GOOGLE APP ENGINE INTO LOCAL SYSTEM

Step 1 -> Visit URL : cloud.google.com/sdk/docs/install and click the download link for GCP SDK

The screenshot shows a web browser window with the URL cloud.google.com/sdk/docs/install. The page is titled "Install the gcloud CLI" and is part of the Google Cloud documentation. The left sidebar contains a navigation menu with sections like "gcloud CLI", "Quickstart", "How-to guides", and "Installing the gcloud CLI". The "Installing the gcloud CLI" section is expanded, showing "Recommended installation" as the selected option. The main content area is for Windows installation, with tabs for Linux, Debian/Ubuntu, Red Hat/Fedora/CentOS, macOS, and Windows. The Windows tab is active, showing instructions for downloading the Google Cloud CLI installer. A note mentions that if behind a proxy or firewall, users should see the proxy settings page. The instructions include a PowerShell command to download the installer from <https://dl.google.com/dl/cloudsdk/channels/rapid> and then run the installer. A recent download history popup is visible in the top right corner, showing "GoogleCloudSDKInstaller (1).exe" as a recent download.

Google Cloud Documentation

Cloud SDK Guides Reference Support Resources

Filter

gcloud CLI

- Product overview
- gcloud CLI overview
- gcloud CLI cheat sheet

Quickstart

- Install the Google Cloud CLI

How-to guides

- All how-to guides
- Installing the gcloud CLI
 - Recommended installation**
 - Other installation methods
 - Setting up the gcloud CLI
 - Managing gcloud CLI components
 - Scripting gcloud CLI commands
 - Enabling accessibility features
 - Using gcloud interactive shell
 - Uninstalling the gcloud CLI

These instructions are for installing the Google Cloud CLI. For information about installing additional components as gcloud CLI commands at the alpha or beta release level, see [Managing gcloud CLI components](#).

★ **Note:** If you are behind a proxy or firewall, see the [proxy settings](#) page for more information on installation.

Linux Debian/Ubuntu Red Hat/Fedora/CentOS macOS **Windows**

The Google Cloud CLI works on Windows 8.1 and later and Windows Server 2012 and later.

1. Download the [Google Cloud CLI installer](#).

Alternatively, open a PowerShell terminal and run the following PowerShell commands:

```
(New-Object Net.WebClient).DownloadFile("https://dl.google.com/dl/cloudsdk/channels/rapid/& $env:Temp\GoogleCloudSDKInstaller.exe")
```

2. Launch the installer and follow the prompts. The installer is signed by Google LLC.

If you're using a screen reader, check the **Turn on screen reader mode** checkbox. This option configures `gcloud` to use status trackers instead of unicode spinners, display progress as a percentage, and flatten tables. For more information, see the [Accessibility features guide](#).

3. Google Cloud CLI requires Python; supported versions are Python 3.8 to 3.13. By default, the Windows version of Google Cloud CLI comes bundled with Python 3. To use Google Cloud CLI on your operating system...

Recent download history

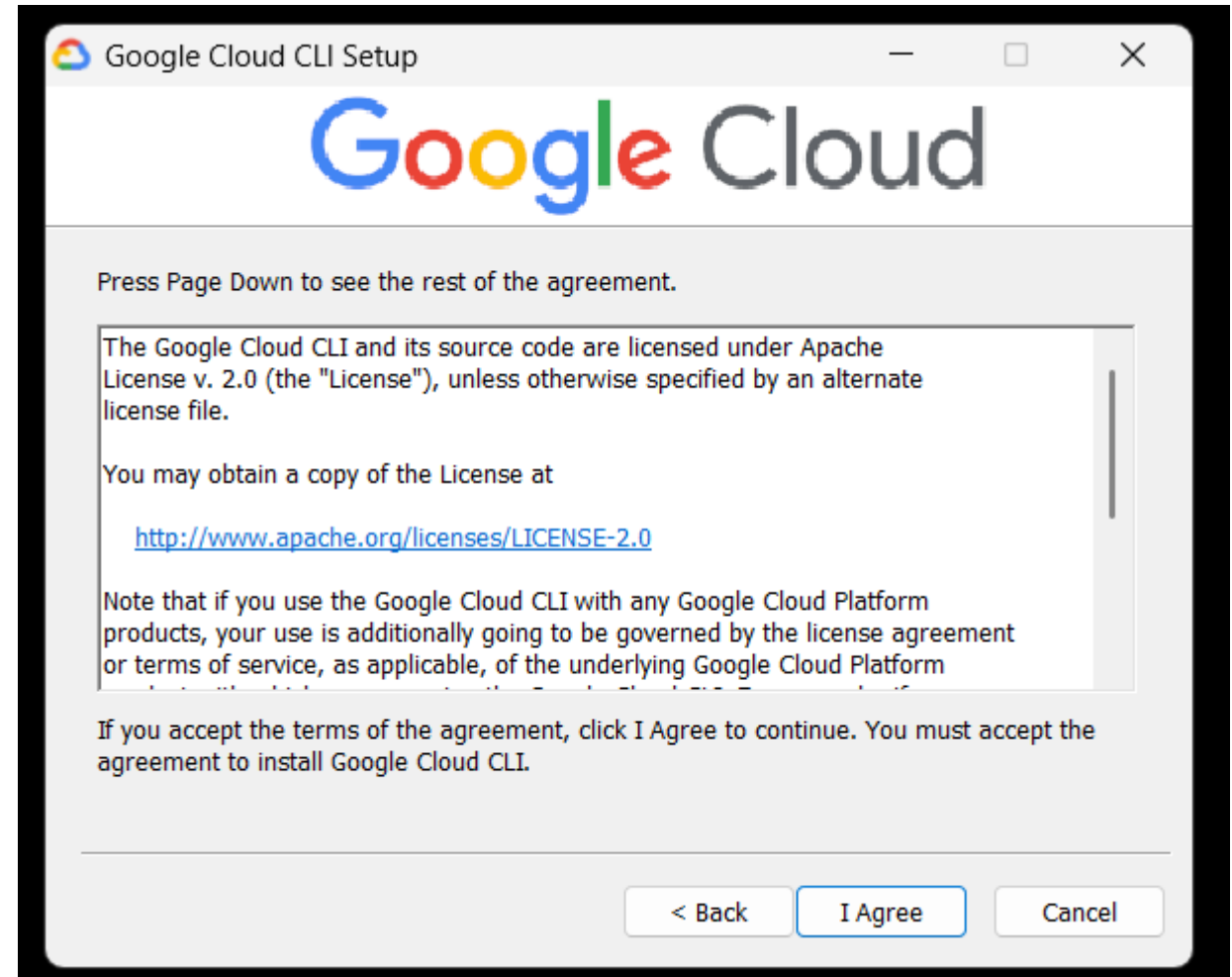
- GoogleCloudSDKInstaller (1).exe
261 KB • Done
- B_26_GOURAB_MONDAL (1).pptx
7.6 MB • 40 minutes ago

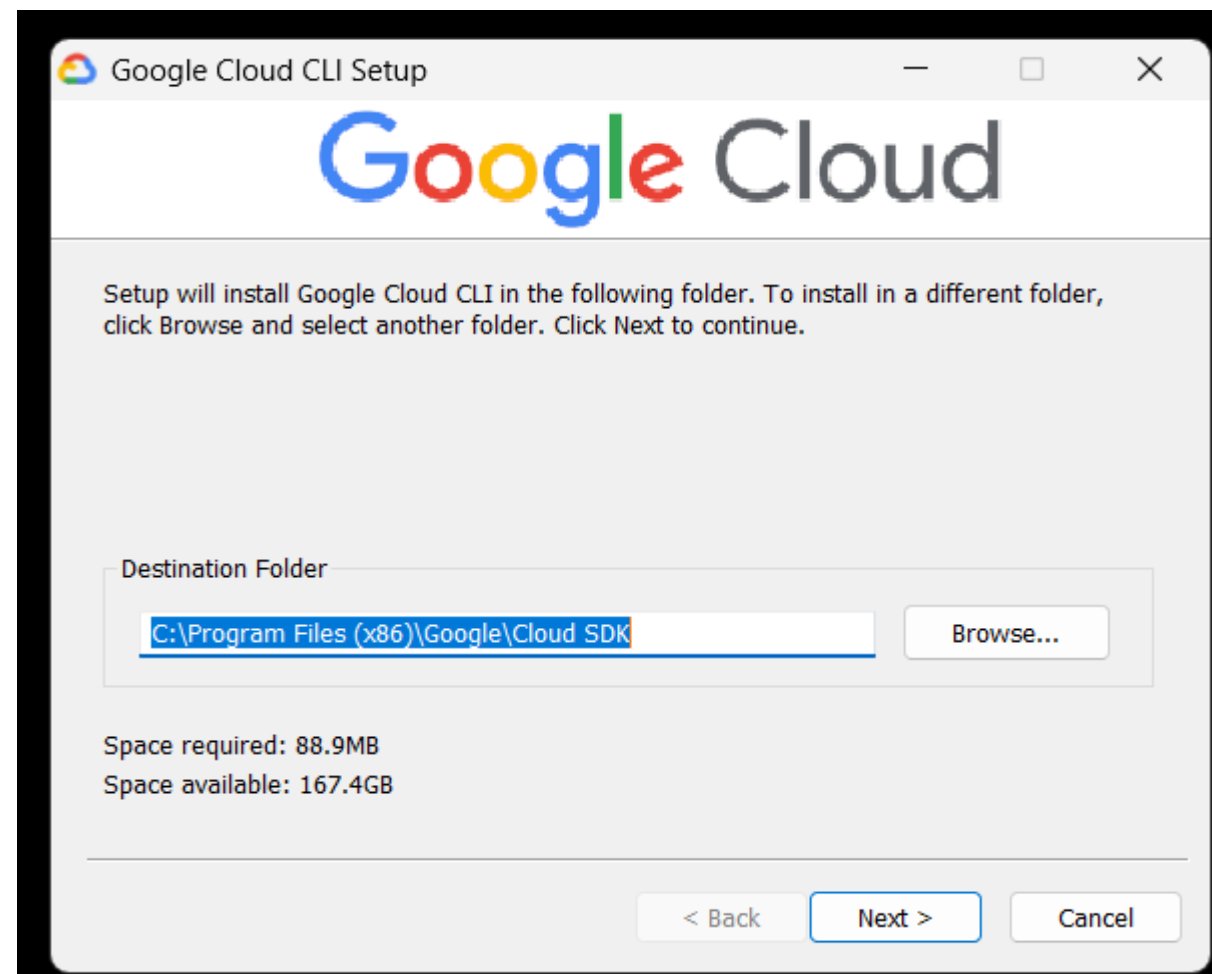
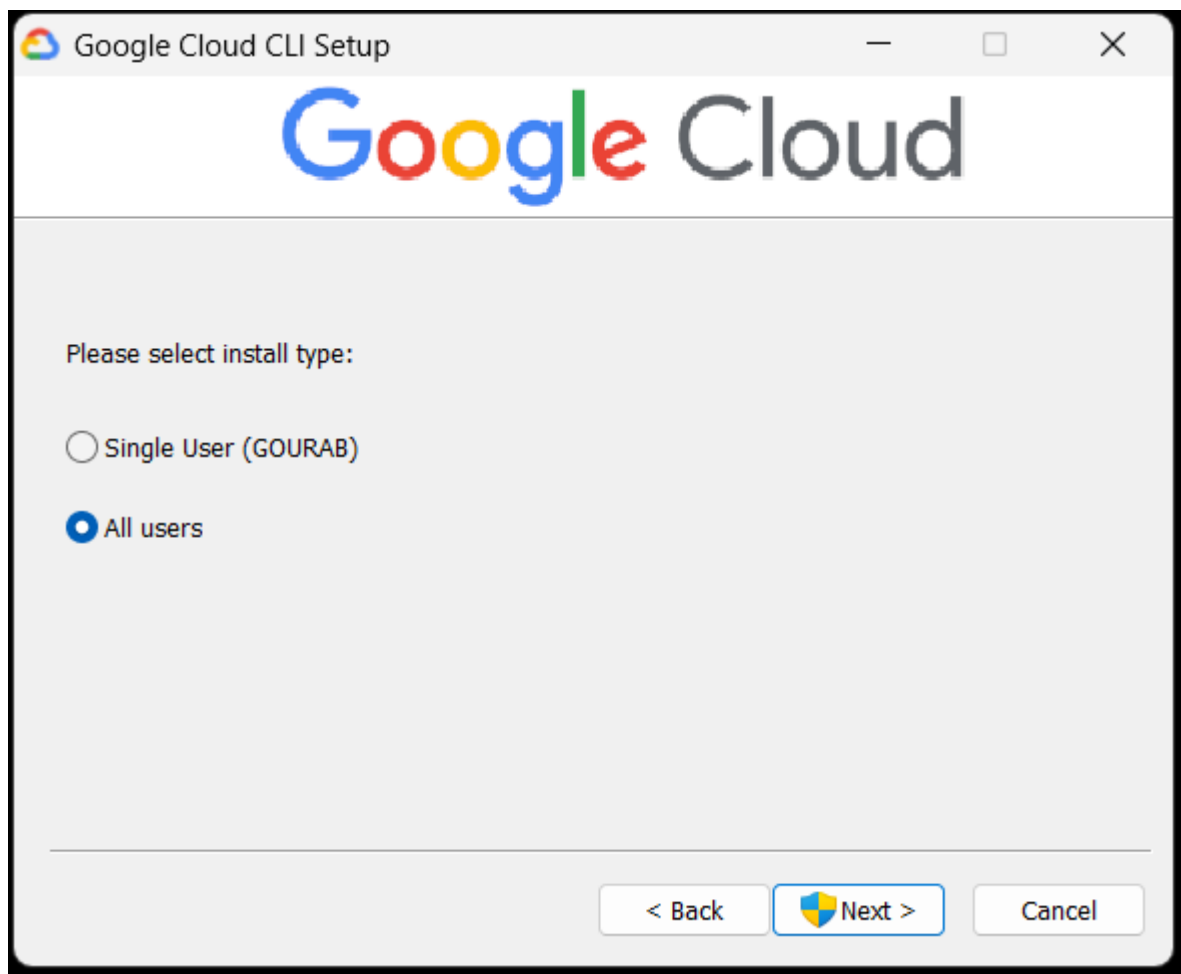
Full download history

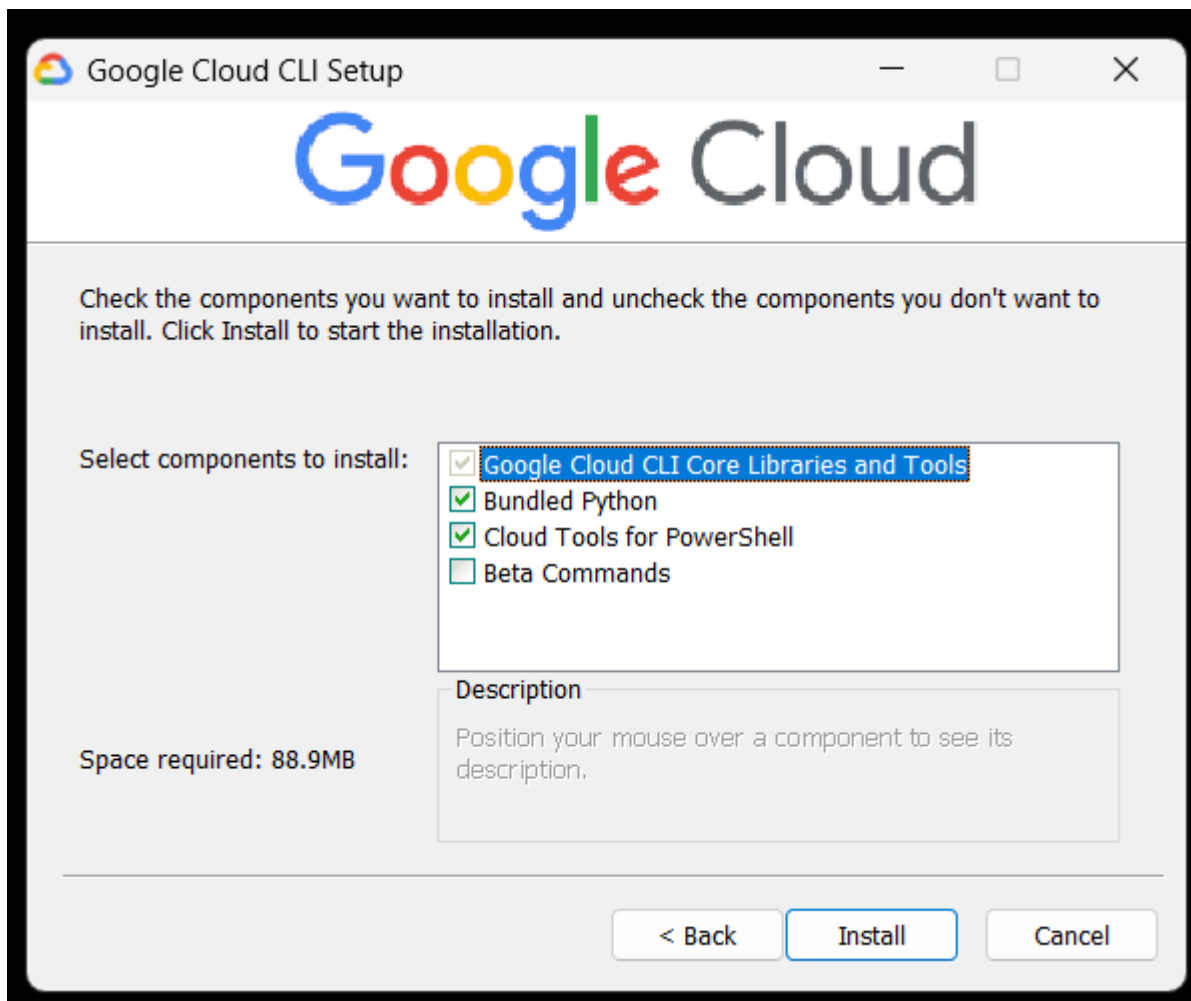
Installation instructions

- Other installation options
- Manage an installation
- Earlier versions of the gcloud CLI
- Supported Python versions

Step 2 ->Run the installer and perform following steps







Step 3 -> Authenticate the cloud CLI with proper credentials and verify installation

```
Welcome to the Google Cloud CLI! Run "gcloud -h" to get the list of available commands.
---
Welcome! This command will take you through the configuration of gcloud.
```

Settings from your current configuration [default] are:

```
accessibility:
  screen_reader: 'False'
core:
  account: gourab.mondal2022@ieminternational.ai
  disable_usage_reporting: 'False'
  project: spry-autumn-451316-e5
```

Pick configuration to use:

```
[1] Re-initialize this configuration [default] with new settings
[2] Create a new configuration
```

Please enter your numeric choice: 1

Your current configuration has been set to: [default]

You can skip diagnostics next time by using the following flag:
gcloud init --skip-diagnostics

Network diagnostic detects and fixes local network connection issues.
Checking network connection...done.
Reachability Check passed.
Network diagnostic passed (1/1 checks passed).

Choose the account you want to use for this configuration.
To use a federated user account, exit this command and sign in to the gcloud CLI with your login configuration file,
then run this command again.

Select an account:
[1] gourab.mondal2022@ieminternational.ai
[2] Sign in with a new Google Account
[3] Skip this step

Please enter your numeric choice: 1

You are signed in as: [gourab.mondal2022@ieminternational.ai].

Pick cloud project to use:

```
[1] spry-autumn-451316-e5
[2] Enter a project ID
[3] Create a new project
```

Please enter numeric choice or text value (must exactly match list item): 1

Your current project has been set to: [spry-autumn-451316-e5].

Do you want to configure a default Compute Region and Zone? (Y/n)? n

Error creating a default .boto configuration file. Please run [gsutil config -n] if you would like to create this file.
The Google Cloud CLI is configured and ready to use!

* Commands that require authentication will use gourab.mondal2022@ieminternational.ai by default

* Commands will reference project 'spry-autumn-451316-e5' by default

Run 'gcloud help config' to learn how to change individual settings

This gcloud configuration is called [default]. You can create additional configurations if you work with multiple accounts and/or projects.
Run 'gcloud topic configurations' to learn more.

Some things to try next:

- * Run 'gcloud --help' to see the Cloud Platform services you can interact with. And run 'gcloud help COMMAND' to get help on any gcloud command.
- * Run 'gcloud topic --help' to learn about advanced features of the CLI like arg files and output formatting
- * Run 'gcloud cheat-sheet' to see a roster of go-to 'gcloud' commands.

C:\Program Files (x86)\Google\Cloud SDK>

```
C:\Program Files (x86)\Google\Cloud SDK>gcloud --version
Google Cloud SDK 511.0.0
bq 2.1.13
core 2025.02.18
gcloud-crc32c 1.0.0
gsutil 5.33
```

```
C:\Program Files (x86)\Google\Cloud SDK>|
```

Step 4 -> Visit URL : <https://cloud.google.com/appengine/downloads> and Install Google App Engine java component

The screenshot shows a web browser window with the address bar displaying cloud.google.com/appengine/downloads. The page header includes the Google Cloud logo and navigation links for Documentation, Technology areas, Cross-product tools, and Related sites. A search bar and a language selector set to English are also present. The main content area is titled "Download and install Google Cloud SDK" and includes a breadcrumb trail "App Engine > Documentation". Below the title, a prompt asks the user to "Select your App Engine environment and language for instructions about downloading and installing Google Cloud SDK:". There are two sections: "Standard environment instructions" and "Flexible environment instructions". Each section contains a grid of buttons for different languages: Go, Java, Node.js, PHP, Python, and Ruby. The "Java" button in the "Standard environment instructions" section is highlighted with a blue border. On the right side, a sidebar titled "On this page" lists links for "Standard environment instructions" and "Flexible environment instructions". At the bottom left, the browser's address bar shows the URL <https://cloud.google.com/appengine/docs/standard/setting-up-environment?tab=java>.

Download and install Google Cloud SDK

Select your App Engine environment and language for instructions about downloading and installing Google Cloud SDK:

Standard environment instructions

Go Java Node.js PHP Python Ruby

Flexible environment instructions

Go Java Node.js

On this page

- Standard environment instructions
- Flexible environment instructions

<https://cloud.google.com/appengine/docs/standard/setting-up-environment?tab=java>

Step 5 -> Copy this CLI command and run in terminal with elevated access

The screenshot shows a web browser window with the URL `cloud.google.com/appengine/docs/standard/setting-up-environment?tab=java`. The page is titled "Setting up your development environment" and is part of the Google Cloud documentation. The left sidebar contains a navigation menu with categories like "Go runtime", "Java runtime", "Node.js runtime", "PHP runtime", "Python runtime", and "Ruby runtime". Under the "Set up your environment" section, the "Set up your development environment" link is highlighted. The main content area lists three steps for setting up the environment:

1. Install the latest release of Java.
See [Java runtime environment](#) for a list of the supported versions.
2. Install and initialize the [gcloud CLI](#) for deploying and managing your apps. If you already have the gcloud CLI installed and initialized, run the `gcloud components update` command to update to the latest release.

By downloading, you agree to be bound by the [Terms](#) that govern use of the gcloud CLI for App Engine.
3. Install the [gcloud component](#) that includes the App Engine extension for a [supported](#) Java version. If you used the `apt` or `yum` package managers to install the gcloud CLI, [use those same package managers to install the gcloud CLI component](#).

Otherwise, use the following command:

```
gcloud components install app-engine-java
```

Optional tools:

- [Install Git](#) for access to code, samples, libraries, and tools in the [Google Cloud GitHub](#) repository.
- Install tools. You can use the Maven or Gradle plugins to build, deploy, and manage your Java services:
 - [Apache Maven and the App Engine Plugin](#)
 - [Gradle and the App Engine Plugin](#)

Note that you must also configure access for Cloud Build.

```
PS C:\Users\GOURAB> gcloud components install app-engine-java
```

```
Your current Google Cloud CLI version is: 511.0.0
Installing components from version: 511.0.0
```

These components will be installed.		
Name	Version	Size
Cloud Datastore Emulator	2.3.1	36.2 MiB
gRPC Python library (Platform Specific)	1.20.0	1.5 MiB
gcloud app Java Extensions	2.0.32	128.5 MiB
gcloud app Python Extensions	1.9.114	3.8 MiB

```
For the latest full release notes, please visit:
https://cloud.google.com/sdk/release\_notes
```

```
Once started, canceling this operation may leave your SDK installation in an inconsistent state.
```

```
Do you want to continue (Y/n)? Y
```

```
Performing in place update...
```

```
#=====#
#= Downloading: Cloud Datastore Emulator           =#
#=====#
#= Downloading: gRPC Python library                 =#
#=====#
#= Downloading: gRPC Python library (Platform Specific) =#
#=====#
#= Downloading: gcloud app Java Extensions          =#
#=====#
#= Downloading: gcloud app Python Extensions        =#
#=====#
#= Installing: Cloud Datastore Emulator             =#
#=====#
#= Installing: gRPC Python library                  =#
#=====#
#= Installing: gRPC Python library (Platform Specific) =#
#=====#
#= Installing: gcloud app Java Extensions           =#
#=====#
#= Installing: gcloud app Python Extensions         =#
#=====#
```

```
Performing post processing steps...done.
```

```
Update done!
```

```
PS C:\Users\GOURAB>
```