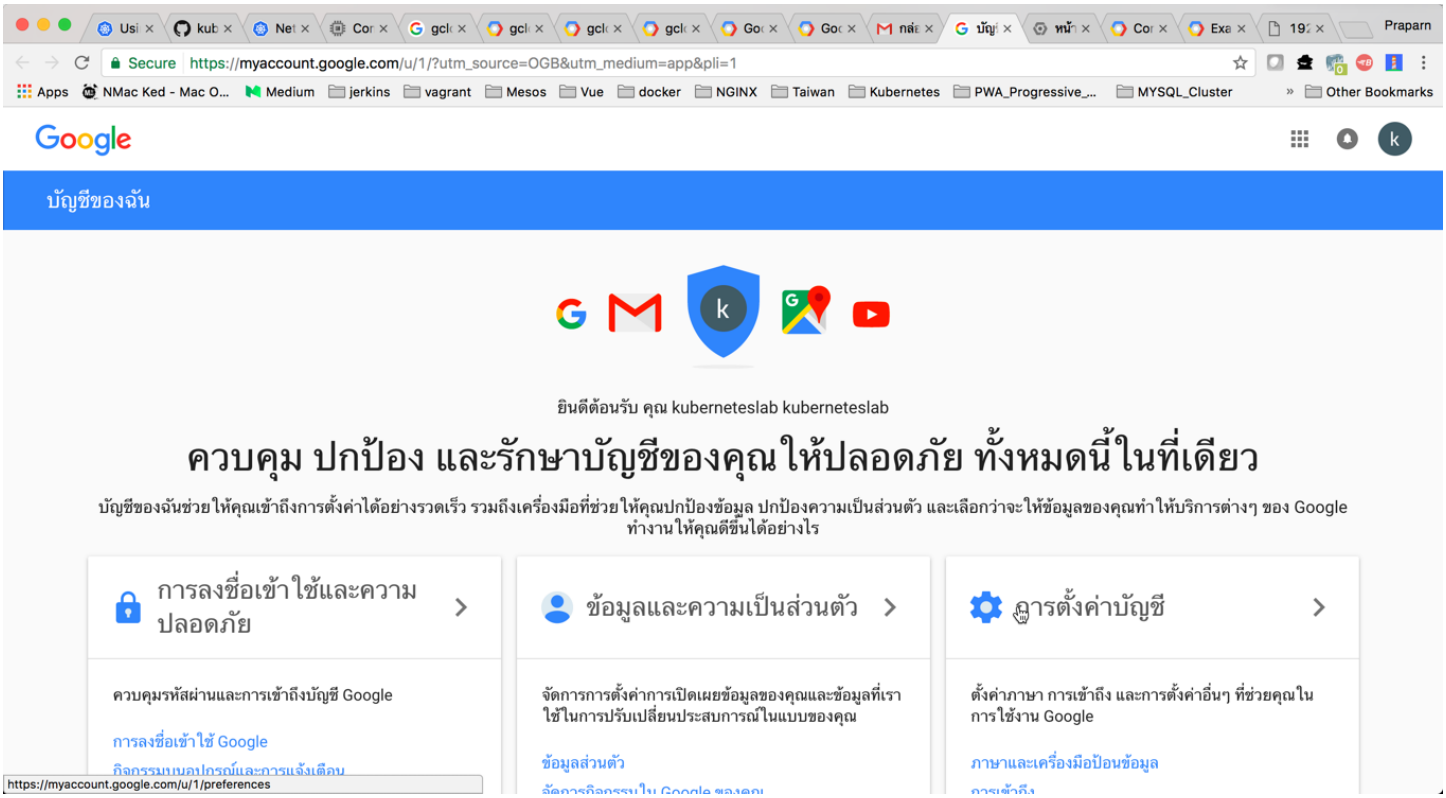
Manual

User GoogleCloud (Free 300 Dollars)

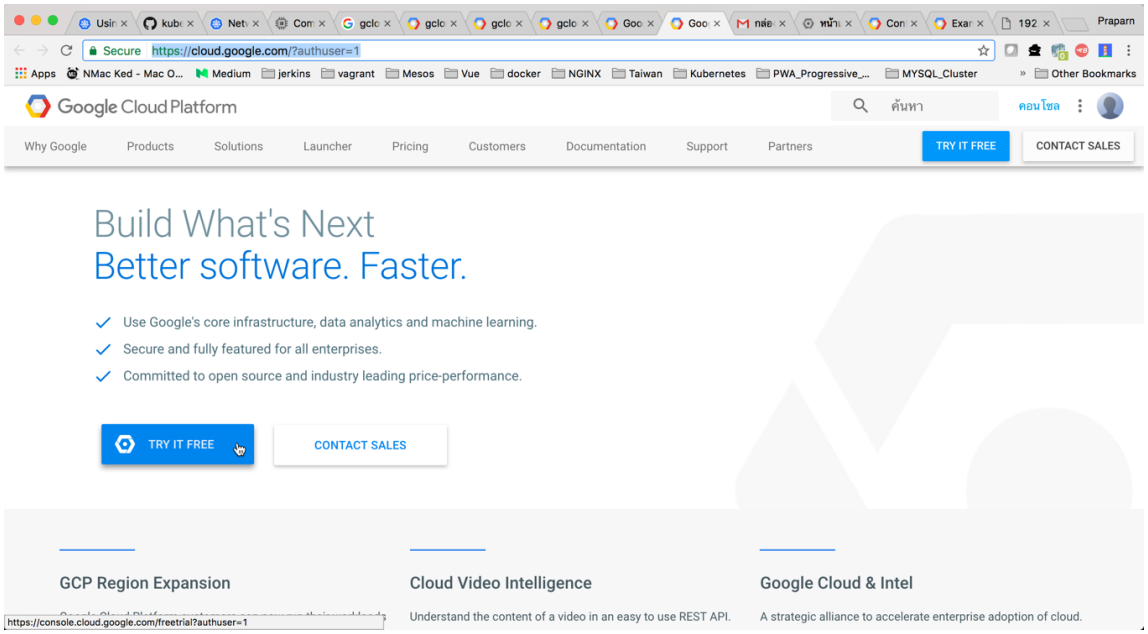
Prerequisite

Recommend to login on google chrome with gmail account.

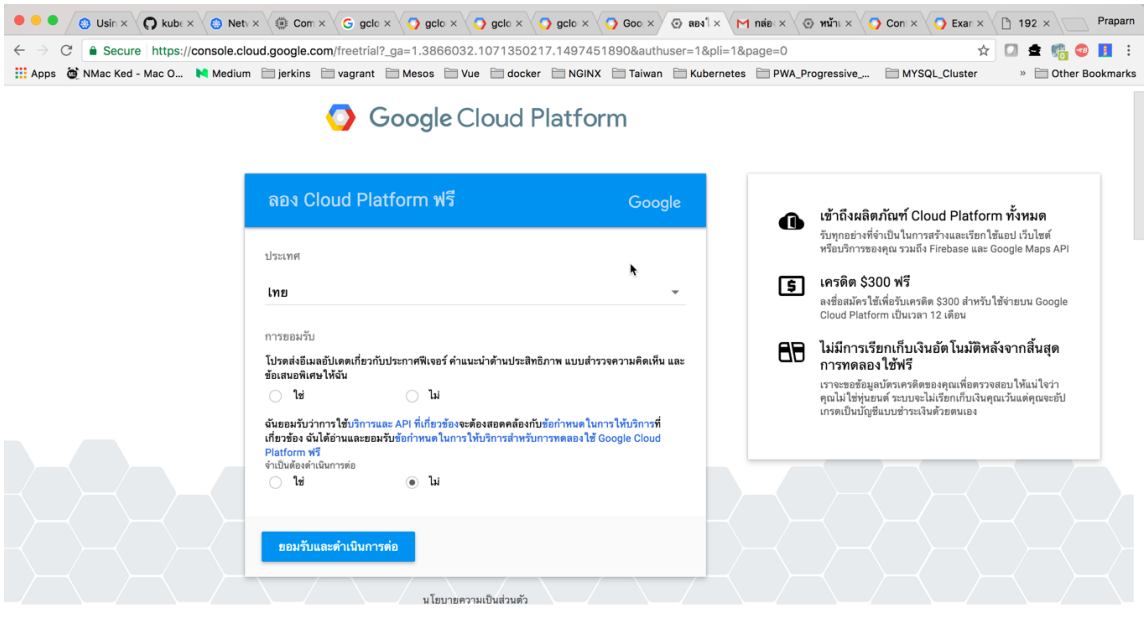


Register for Google Cloud

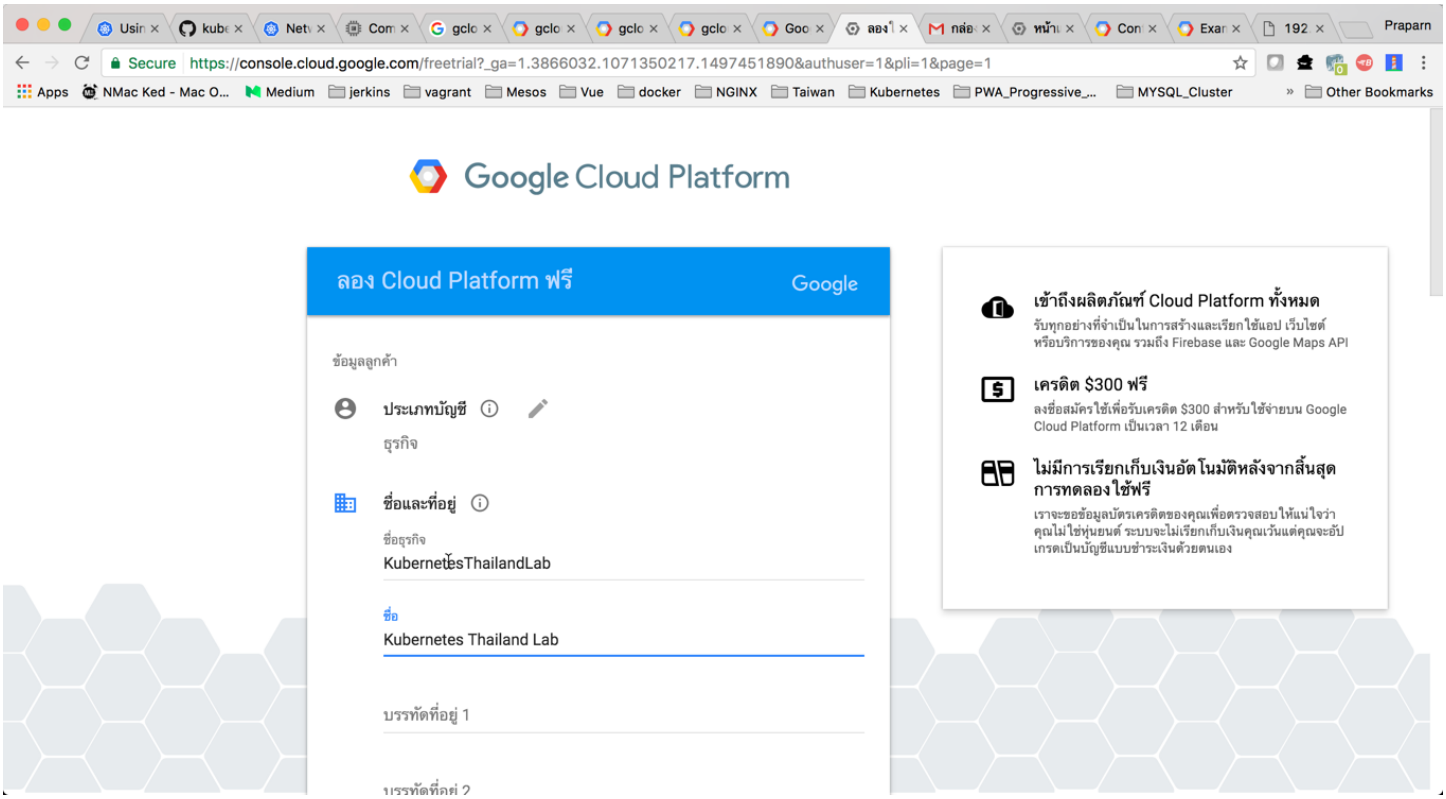
1. Open url: https://cloud.google.com and "Try IT FREE"



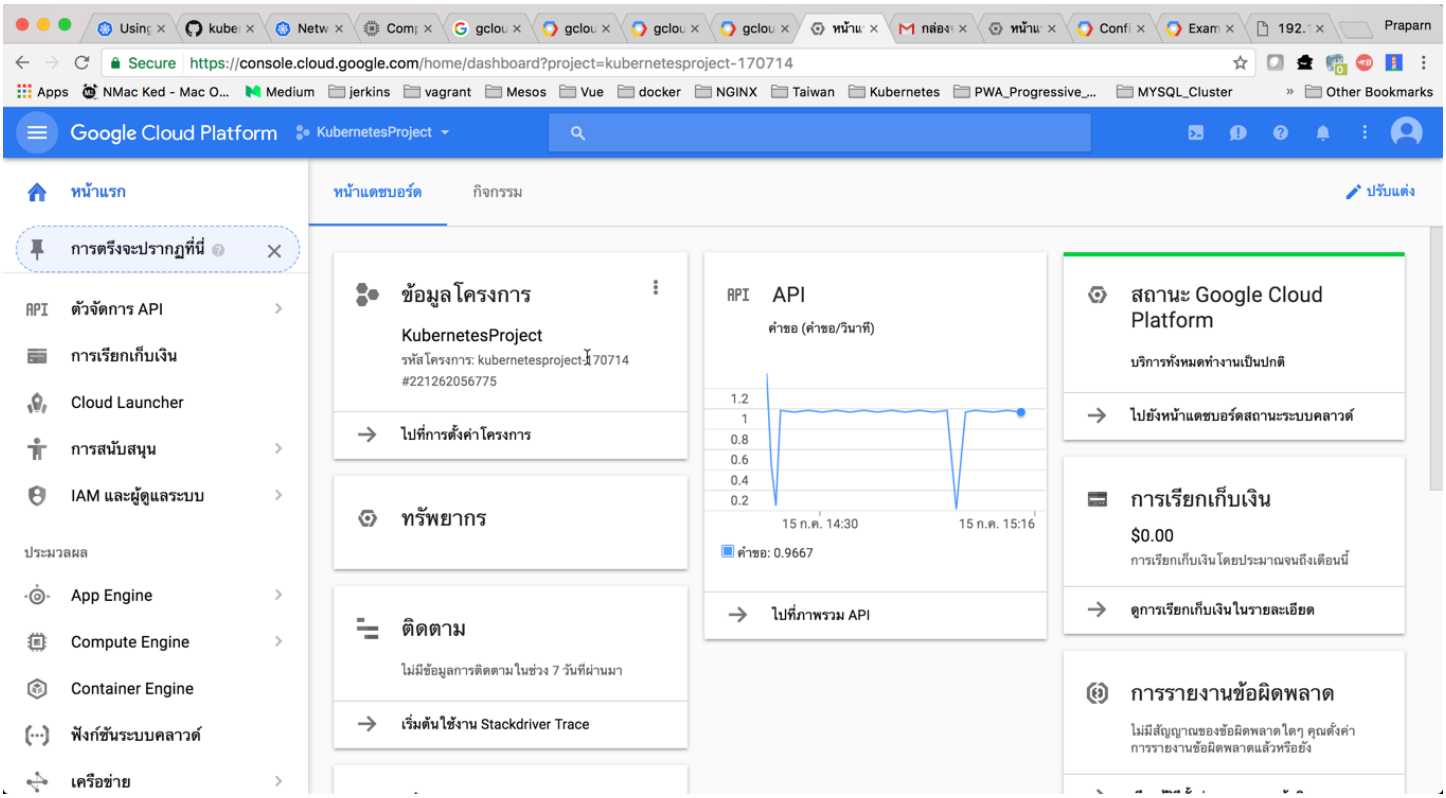
2. Select Country and Access Condition



3. Input require data and accept condition (Need to input credit card/some confidential data)



4. After finished. Choose to create new project name "KubernetesProject" and record project code for reference

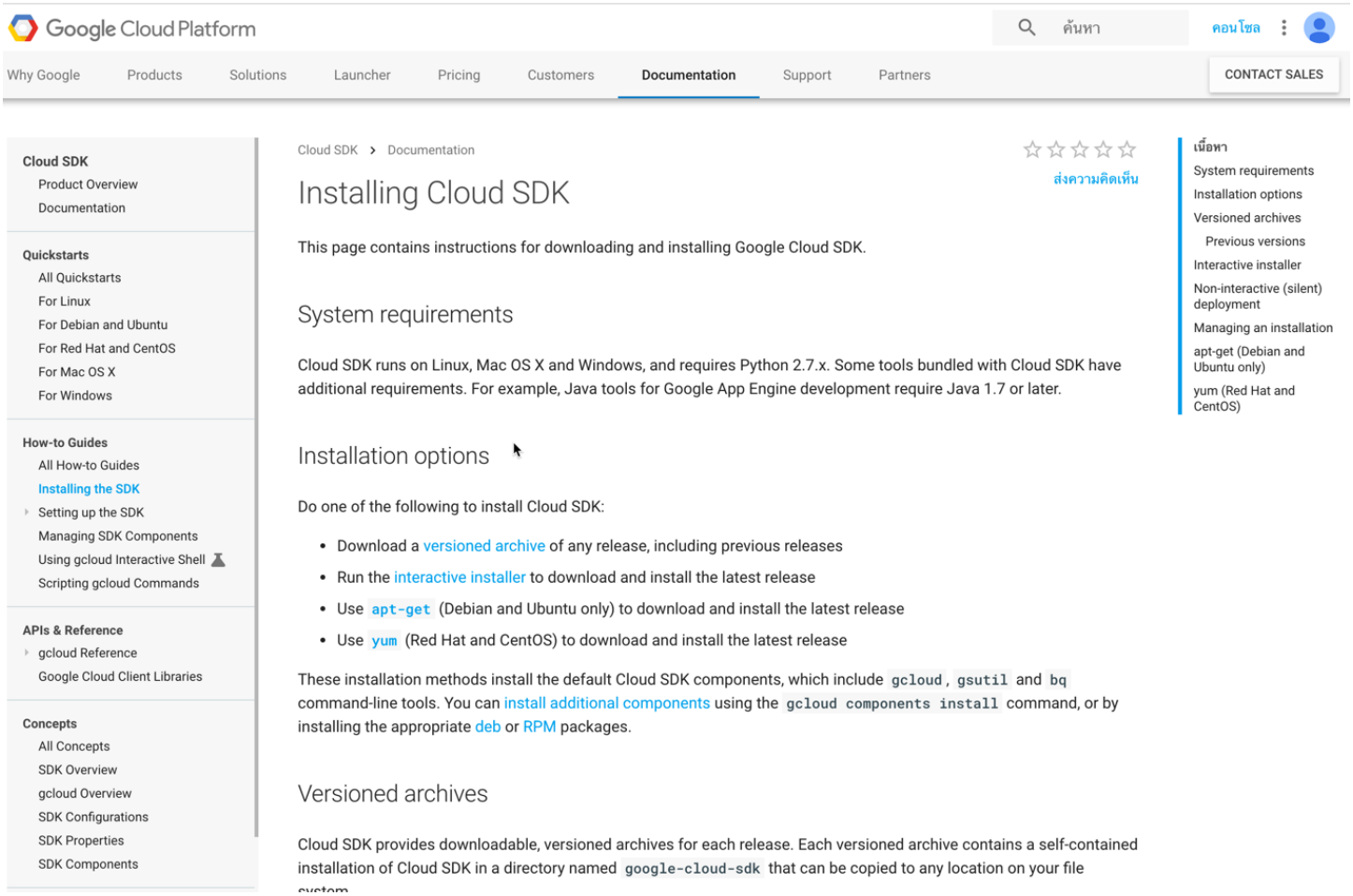


Install GCloud Tool

Following Gcloud Instruction/Downlad-install with step like below

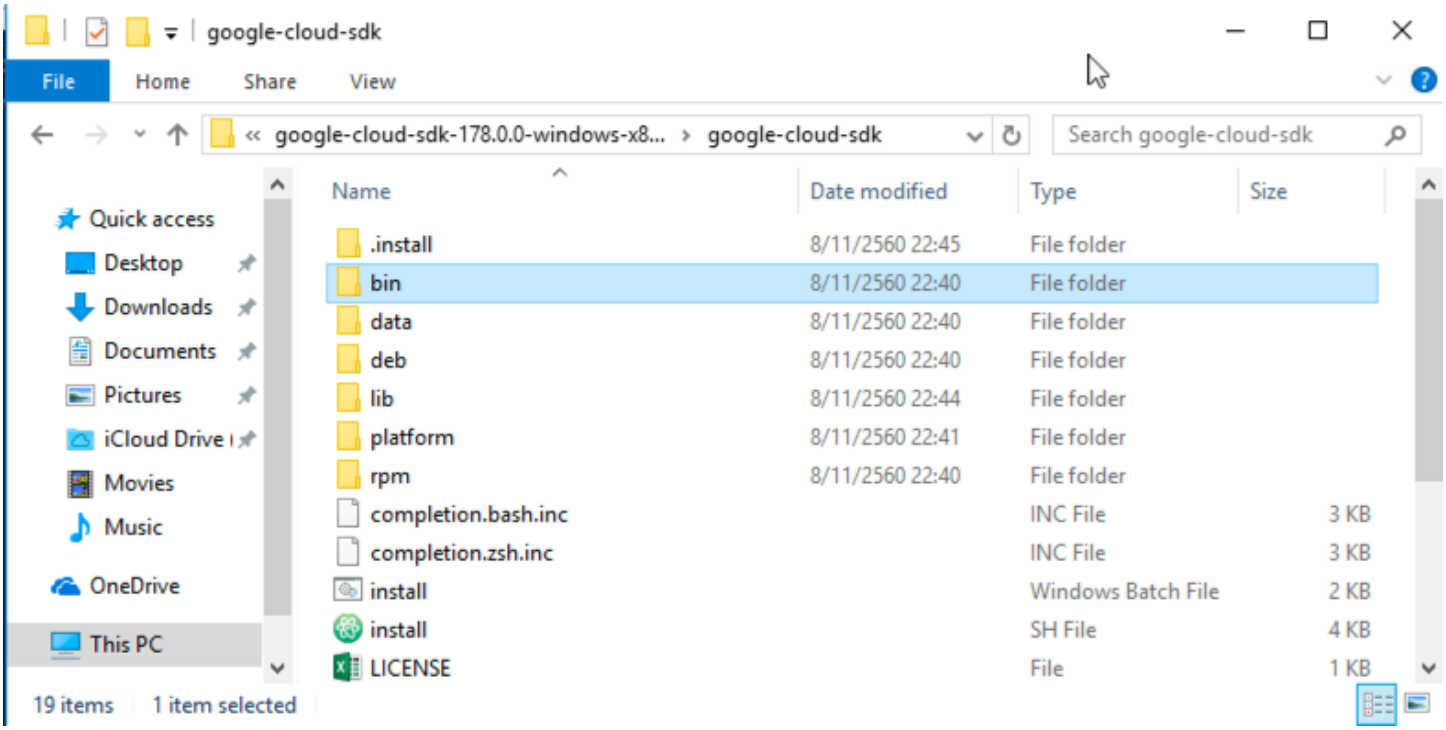
1. Install gcloud tool

Ref: https://cloud.google.com/sdk/downloads



1.1 For windows (Google Cloud SDK)

1.1.1 Extract google-cloud-sdk-178.0.0-windows zip file to folder



1.1.2 Run powershell as "Administrator" and run install.bat

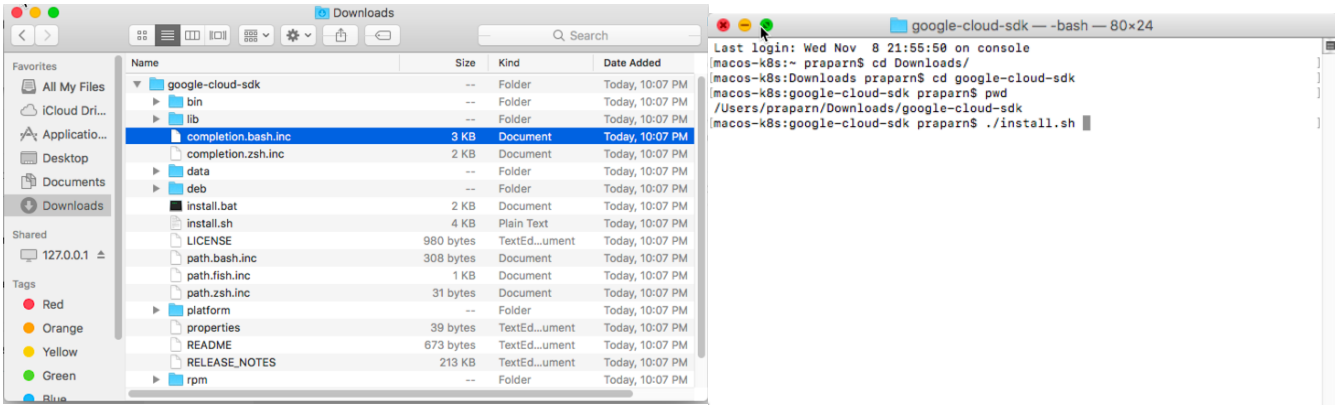
```
PS C:\kubernetes\google-cloud-sdk-178.0.0-windows-x86_64-bundled-python\google-cloud-sdk> .\install.bat
Welcome to the Google Cloud SDK!

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>. You may choose
to opt out of this collection now (by choosing 'N' at the below prompt), or at
any time in the future by running the following command:

    gcloud config set disable_usage_reporting true

Do you want to help improve the Google Cloud SDK (Y/n)?  n


Your current Cloud SDK version is: 178.0.0
The latest available version is: 178.0.0

+-----------------------------------------------------------------------------------------------+
|                                          Components                                           |
+--------------+---------------------------------------------------+-----------------------+-----------+
|    Status    |                       Name                        |          ID           |    Size   |
+--------------+---------------------------------------------------+-----------------------+-----------+
| Not Installed | App Engine Go Extensions                          | app-engine-go         |  98.9 MiB |
| Not Installed | Cloud Bigtable Command Line Tool                  | cbt                   |   4.0 MiB |
| Not Installed | Cloud Bigtable Emulator                           | bigtable              |   3.5 MiB |
| Not Installed | Cloud Datalab Command Line Tool                   | datalab               |   < 1 MiB |
| Not Installed | Cloud Datastore Emulator                          | cloud-datastore-emulator |  17.7 MiB |
| Not Installed | Cloud Datastore Emulator (Legacy)                 | gcd-emulator          |  38.1 MiB |
| Not Installed | Cloud Pub/Sub Emulator                            | pubsub-emulator       |  33.2 MiB |
| Not Installed | Emulator Reverse Proxy                            | emulator-reverse-proxy |  14.5 MiB |
| Not Installed | Google Container Registry's Docker credential helper | docker-credential-gcr |   2.1 MiB |
| Not Installed | gcloud Alpha Commands                             | alpha                 |   < 1 MiB |
| Not Installed | gcloud Beta Commands                              | beta                  |   < 1 MiB |
| Not Installed | gcloud app Java Extensions                        | app-engine-java       | 116.0 MiB |
| Not Installed | gcloud app PHP Extensions                         | app-engine-php        |  19.1 MiB |
| Not Installed | gcloud app Python Extensions                      | app-engine-python     |   6.2 MiB |
| Not Installed | kubectl                                           | kubectl               |  12.3 MiB |
| Installed     | BigQuery Command Line Tool                        | bq                    |   < 1 MiB |
| Installed     | Cloud SDK Core Libraries                          | core                  |   7.4 MiB |
| Installed     | Cloud Storage Command Line Tool                   | gsutil                |   3.3 MiB |
+--------------+---------------------------------------------------+-----------------------+-----------+
To install or remove components at your current SDK version [178.0.0], run:
  $ gcloud components install COMPONENT_ID
  $ gcloud components remove COMPONENT_ID

To update your SDK installation to the latest version [178.0.0], run:
  $ gcloud components update

Update %PATH% to include Cloud SDK binaries? (Y/n)?
```

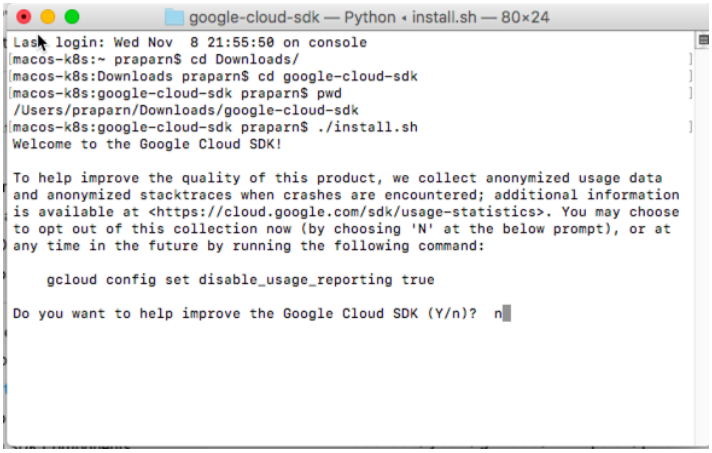
1.1.3 Open command promopt and access to path "bin" and run "gcloud init" and Logon system for initial gcloud and following instruction until end

```
C:\kubernetes>cd google-cloud-sdk-178.0.0-windows-x86_64-bundled-python

C:\kubernetes\google-cloud-sdk-178.0.0-windows-x86_64-bundled-python>cd google-cloud-sdk

C:\kubernetes\google-cloud-sdk-178.0.0-windows-x86_64-bundled-python\google-cloud-sdk>cd bin

C:\kubernetes\google-cloud-sdk-178.0.0-windows-x86_64-bundled-python\google-cloud-sdk\bin>gcloud init
Welcome! This command will take you through the configuration of gcloud.

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.../
```

1.2 For MAC OS X

1.2.1 Extract folder "google-cloud-sdk" and run "install.sh"





Your current Cloud SDK version is: 178.0.0
The latest available version is: 178.0.0

Components			
Status	Name	ID	Size
Not Installed	App Engine Go Extensions	app-engine-go	97.7 MiB
Not Installed	Cloud Bigtable Command Line Tool	cbt	4.0 MiB
Not Installed	Cloud Bigtable Emulator	bigtable	3.5 MiB
Not Installed	Cloud Datalab Command Line Tool	datalab	< 1 MiB
Not Installed	Cloud Datastore Emulator	cloud-datastore-emulator	17.7 MiB
Not Installed	Cloud Datastore Emulator (Legacy)	gcd-emulator	38.1 MiB
Not Installed	Cloud Pub/Sub Emulator	pubsub-emulator	33.2 MiB
Not Installed	Emulator Reverse Proxy	emulator-reverse-proxy	14.5 MiB
Not Installed	Google Container Local Builder	container-builder-local	3.7 MiB
Not Installed	Google Container Registry's Docker credential helper	docker-credential-gcr	2.2 MiB
Not Installed	gcloud Alpha Commands	alpha	< 1 MiB
Not Installed	gcloud Beta Commands	beta	< 1 MiB
Not Installed	gcloud app Java Extensions	app-engine-java	116.0 MiB
Not Installed	gcloud app PHP Extensions	app-engine-php	21.9 MiB
Not Installed	gcloud app Python Extensions	app-engine-python	6.2 MiB
Not Installed	kubectl	kubectl	12.2 MiB
Installed	BigQuery Command Line Tool	bq	< 1 MiB
Installed	Cloud SDK Core Libraries	core	7.4 MiB
Installed	Cloud Storage Command Line Tool	gsutil	3.3 MiB

To install or remove components at your current SDK version [178.0.0], run:
  $ gcloud components install COMPONENT_ID
  $ gcloud components remove COMPONENT_ID

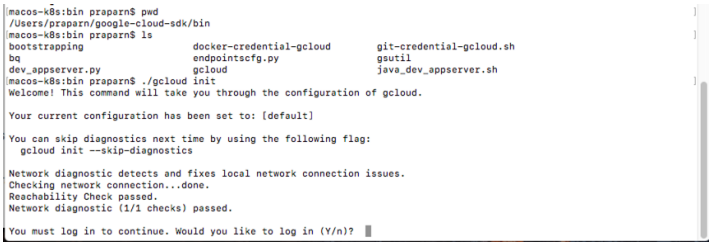
To update your SDK installation to the latest version [178.0.0], run:
  $ gcloud components update

==> Source [/Users/praparn/Downloads/google-cloud-sdk/completion.bash.inc] in your profile to enable shell command completion for gcloud.
==> Source [/Users/praparn/Downloads/google-cloud-sdk/path.bash.inc] in your profile to add the Google Cloud SDK command line tools to your $PATH.

For more information on how to get started, please visit:
  https://cloud.google.com/sdk/docs/quickstarts

macos-k8s:google-cloud-sdk praparn$

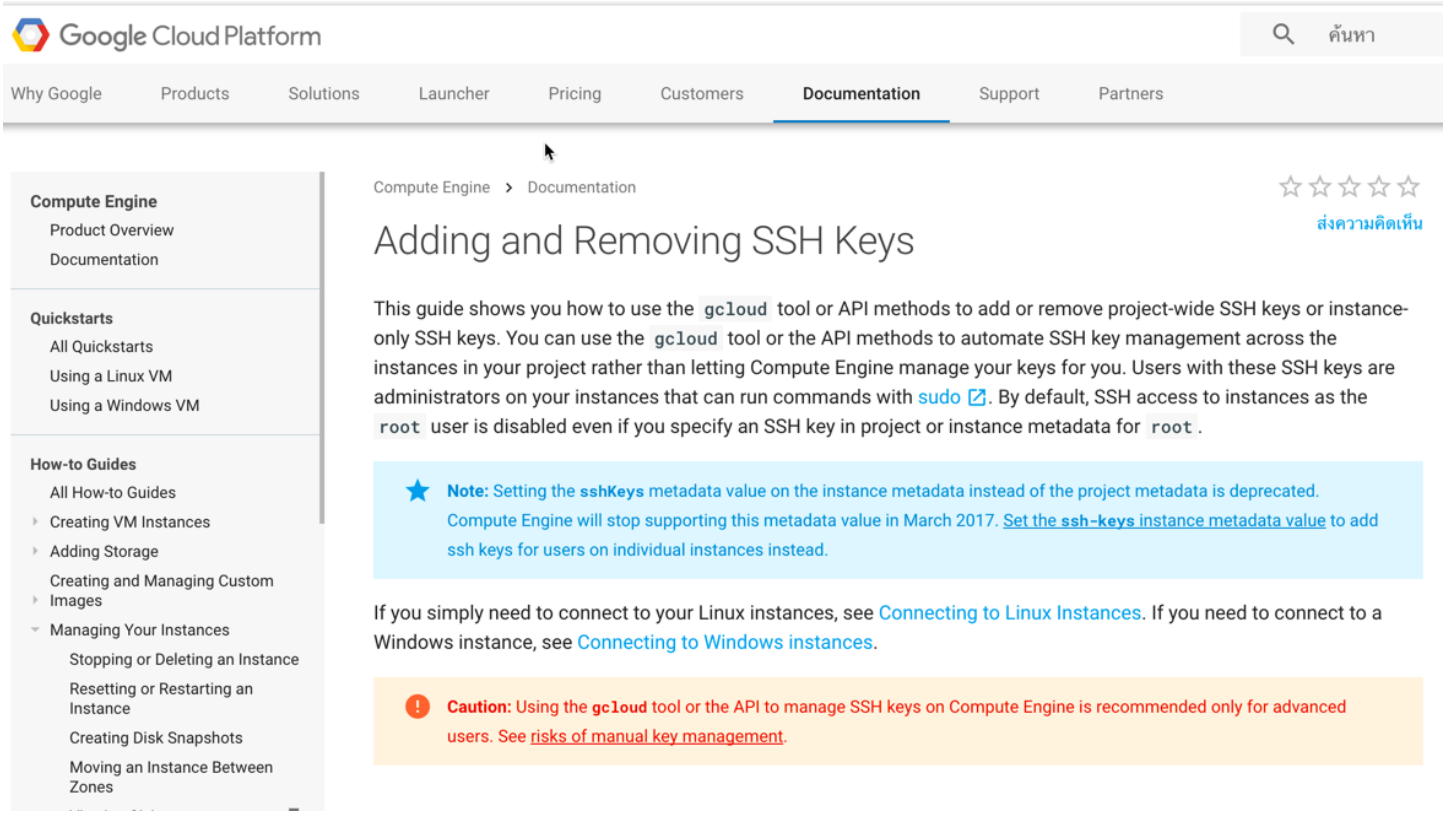
1.2.2 Access to “bin” and Initial by command: gcloud init



Generate Key/Import key

Following Gcloud Instruction for generate and import SSH Keys to GCloud

https://cloud.google.com/compute/docs/instances/adding-removing-ssh-keys



Following Gcloud Instruction for generate and import SSH Keys to GCloud

*Remark: After generate key with format finished. You must use gcloud for insert sshKeys authentication with Public key to Google Cloud

Add or remove project-wide public keys using the `gcloud` tool.

1. Obtain your existing project-wide `sshKeys` metadata value for your instance.

```
gcloud compute project-info describe

...
metadata:
  fingerprint: Rq1XCvmRVik=
  items:
  - key: sshKeys
    value: [USERNAME]:ssh-rsa [EXISTING_KEY_VALUE_1] [USERNAME]\n[USERNAME]:ssh-rsa [EXISTING_K
...
```

   where:

   - `[USERNAME]` is the username for your existing keys.
   - `[EXISTING_KEY_VALUE_1]` and `[EXISTING_KEY_VALUE_2]` are public key values that are already applied to your project.

2. Merge your existing keys with any new keys that you are adding, and leave out any keys that you want to delete. For this example, the file contains a new `[KEY_VALUE]` followed by one of the existing key values that you obtained in the previous step. The `[EXISTING_KEY_VALUE_1]` is left out, and is removed from the instance in the next step.

```
[USERNAME]:ssh-rsa [KEY_VALUE] [USERNAME]
[USERNAME]:ssh-rsa [EXISTING_KEY_VALUE_2] [USERNAME]
```

   where:

   - `[USERNAME]` is the username for your existing keys.
   - `[KEY_VALUE]` is the new key value that you are adding to the project.
   - `[EXISTING_KEY_VALUE_1]` is a public key values that is already applied to your project, but you need to remove it.
   - `[EXISTING_KEY_VALUE_2]` is a public key values that is already applied to your project and you want to keep.

3. Use the `compute project-info add-metadata` command to set the project-wide `sshKeys` value. For this example, include the `--metadata-from-file` flag and specify the path to your file on your local client.

```
gcloud compute project-info add-metadata
--metadata-from-file sshKeys=[KEY_FILE_NAME].pub
```

   where `[KEY_FILE_NAME]` is the name of your public key file.