Make WooCommerce API in Wordpress

First of all, we look for requirements :
- Apache
- Mysql
- Php
- Wordpress
- Woocommerce plugin

So, first install apache, mysql and php :
> sudo apt-get install apache2 mysql-server php

After installation, you will be asked for root password.
and if not, then fire following command :
> sudo mysql_secure_connection

It will ask for validate_password plugin. You can choose as per your choice and add password. Also some more questions will be their for y/n answer, you have to choose as per your requirement.

Now start both apache2 and mysql service :
> sudo systemctl enable apache2
> sudo systemctl start apache2
> sudo systemctl enable mysql
> sudo systemctl start mysql

After doing that, we also need to install some PHP modules :
> sudo apt-get install php7.0-mysql libapache2-mod-php7.0 php7.0-cli php7.0-cgi php7.0-gd

Now, first to check if php is working, make a file by following :
> sudo vi var/www/html/info.php

And paste this code in it :
<?php
phpinfo();
?>

Now check the file by entering address in browser :
http://server-address/info.php

If php is working, you will see something like this.

Installing Wordpress :

Now, download the wordpress package and extract it :
> sudo wget -c http://wordpress.org/latest.tar.gz
> sudo tar -xzvf latest.tar.gz

Now add wordpress files to Apache root directory :
> sudo rsync -av wordpress/* /var/www/html/

Set permissions on directory :
>sudo chown -R www-data:www-data /var/www/html/
> sudo chmod -R 755 /var/www/html/

Database for Wordpress :

Now, we need to create a database for wordpress.
Enter in mysql shell :
> sudo mysql -u root -p

Create database:
mysql> CREATE DATABASE wordpress;

We need to create a user, because the root will not work in PHP.
mysql>CREATE USER 'wpuser'@'localhost' IDENTIFIED BY 'password'

Now, give privileges to that user :
mysql> GRANT ALL PRIVILEGES ON wordpress.* TO 'wpuser'@'localhost' IDENTIFIED BY 'password';

mysql> FLUSH PRIVILEGES;
mysql> EXIT;

Now restart both servers :
> sudo systemctl restart apache2
> sudo systemctl restart mysql

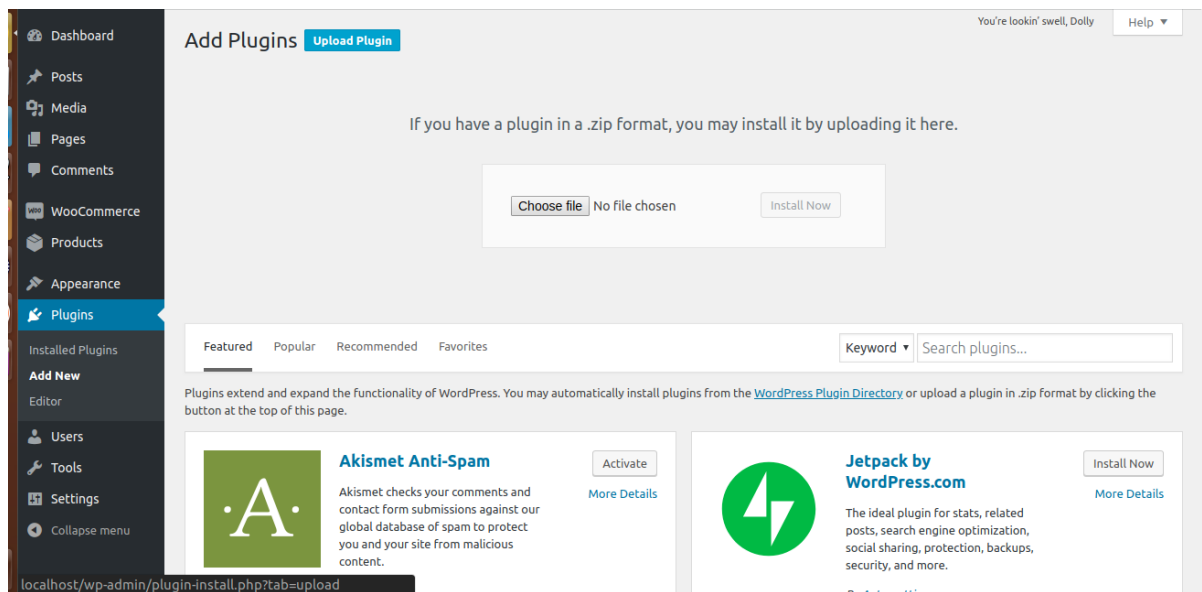Run your server address in browser, it's ready.

Wordpress will ask you for database host, user, password, name and table prefix.

It will also ask for username, password, app name and email address in next page.

Fill up details, it will lead you to wordpress login page, enter credentials.

Installing WooCommerce :

In Wordpress, go to Add new plugin and click on upload plugin.

Now, upload the Woocommerce zip file downloaded from https://wordpress.org/plugins/woocommerce/
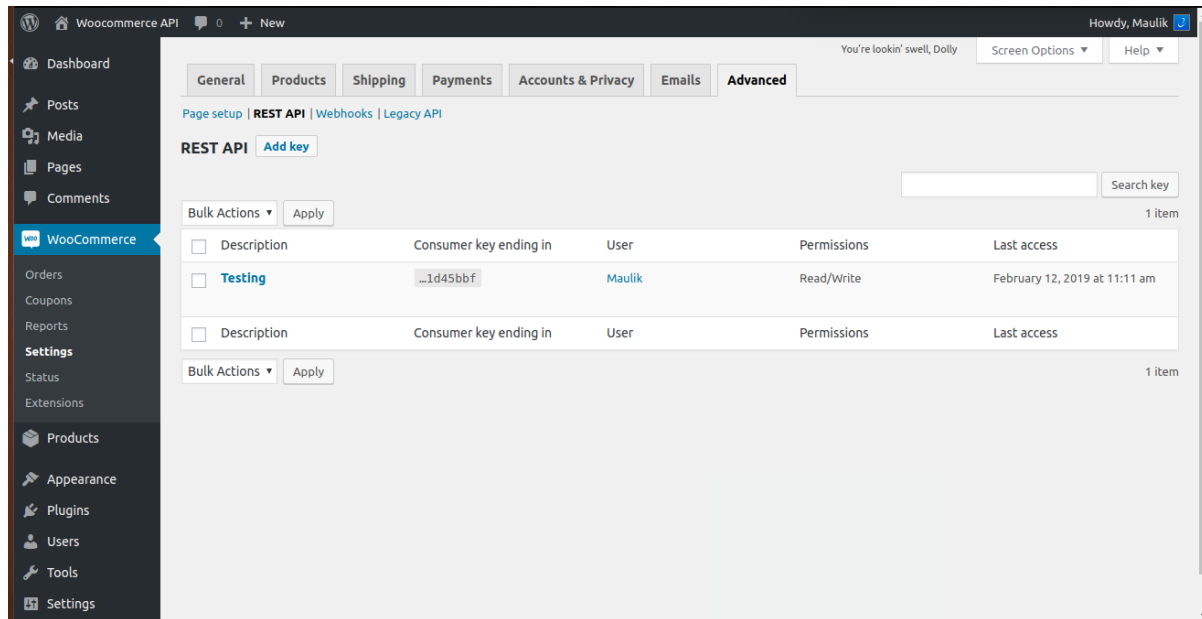
After uploading, Activate it & you will see 2 new options in sidebar :
1. WooCommerce
2. Products

For testing, add some products or orders or categories etc.

Getting WooCommerce API keys :

Now goto WooCommerce > settings > Advanced > REST API.

Click Add key and fill description, select user and select required permission (Read/Write/Both). Click on Generate API key Button.
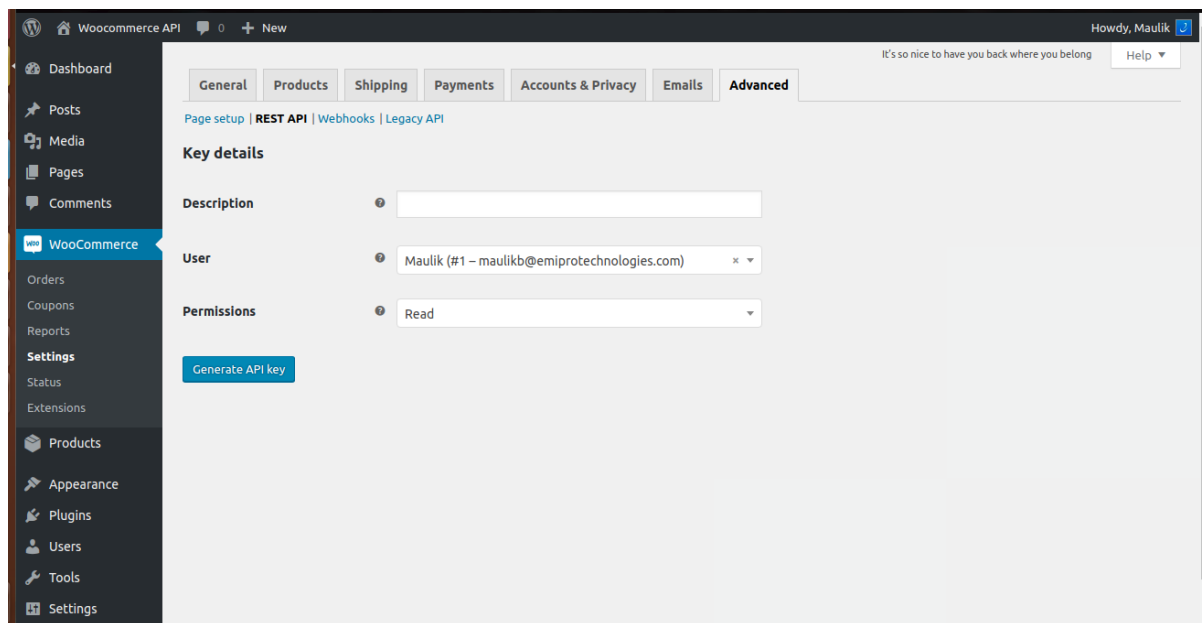
It will display you consumer key and consumer secret.

<mark>You must have to copy it somewhere, because it will never show you again these keys</mark>.

So, the WooCommerce API is Successfully made.

Testing Woocommerce API using Postman:

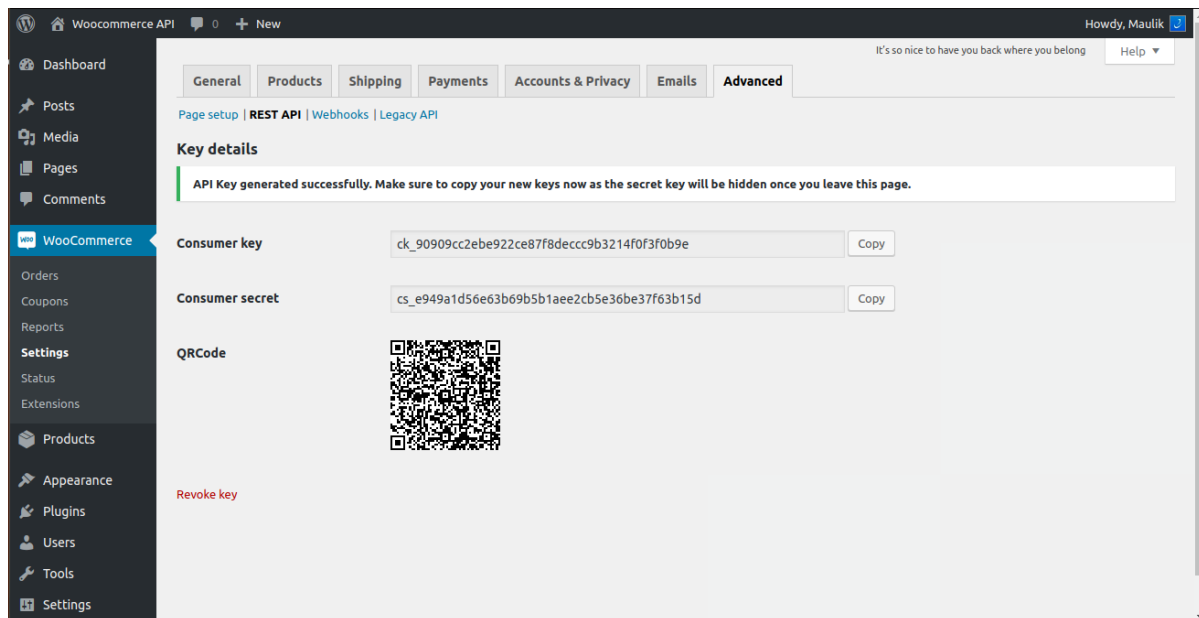After creating API, we need to test it.
Here I used Postman Application.

Also refer WooCommerce API documentation for how use and access it :
https://woocommerce.github.io/woocommerce-rest-api-docs

You can download Postman from here :
https://www.getpostman.com/downloads/

Or test using Python in next chapter.

For basic testing,if the API is working, it will list all API details. Just pass :
http://localhost/wp-json/wc/v3/
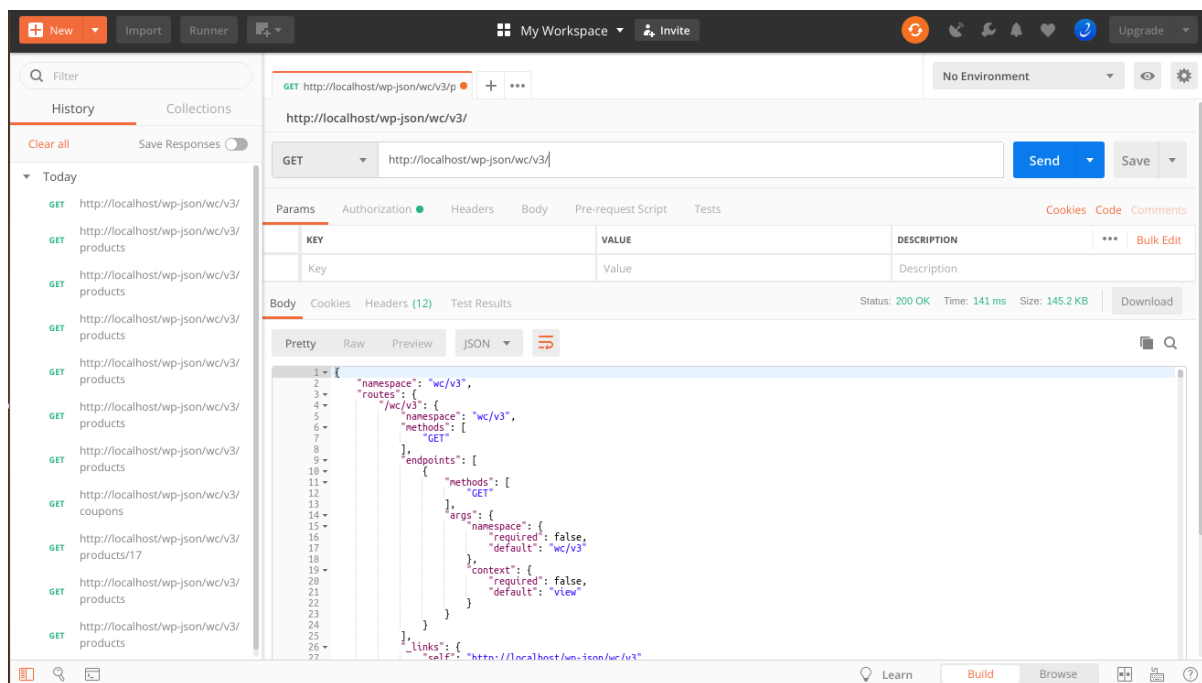
If you can see this, your API is working.

Now get categories or products or anything WooCommerce provides.
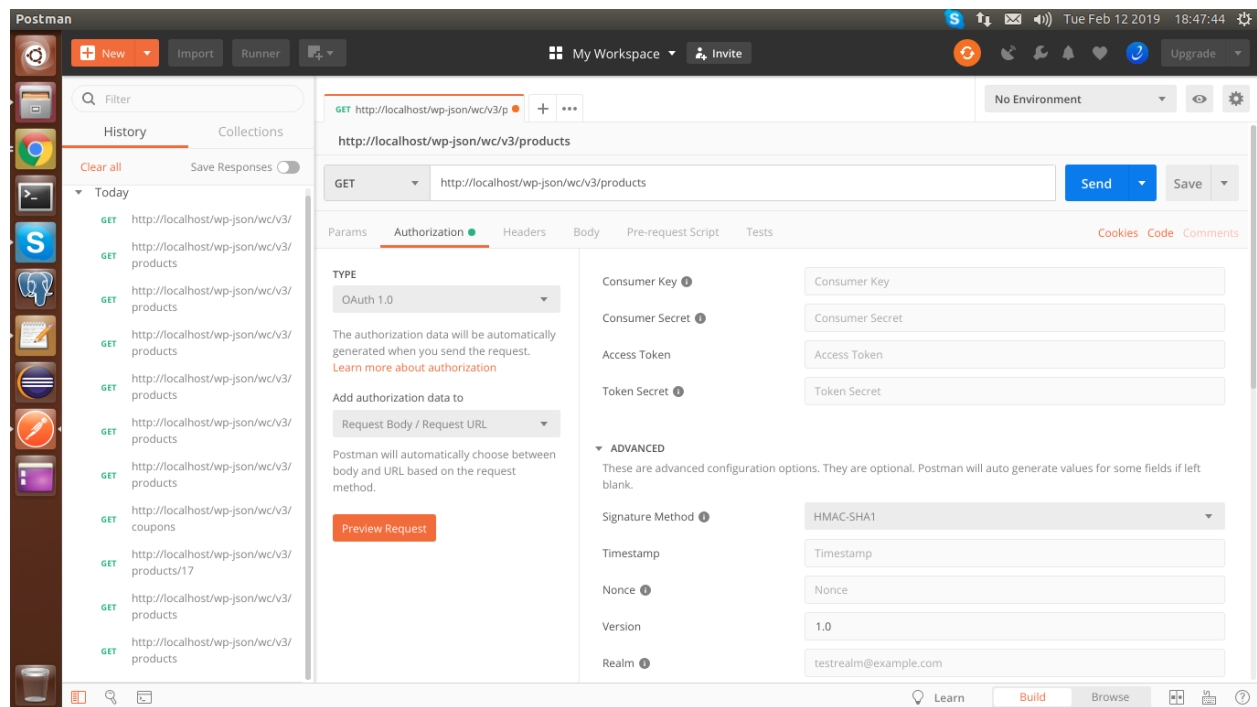You have to give consumer key and secret in Authorization Tab.
In Authorization tab, select Authorization type : OAuth 1.0 and add
consumer key and secret.
Click on send Button.

It will give you response in JSON.
If you give /products, it will give you all your products data in response.
You can get single product data with /products/{ID} (By giving ID)

You can check various urls in WooCommerce API Documentation.

Testing WooCommerce API in Python :

For some languages, WooCommerce provides official libraries.

To use API in Python, install library by :
`> sudo pip install woocommerce`

Now make a python file and add this code :
```
from woocommerce import API

wcapi = API(
    url="http://localhost",
    consumer_key="your_consumer_key",
    consumer_secret="your_consumer_secret",
    wp_api=True,
    version="wc/v3"
    )
```

You can now access API by "wcapi" object. You don't need to write "wc/v3" or any other :
`wcapi.get("products")`

You have to call method - type of request (get, post, delete etc.) and type of data (products, categories, coupons etc.)

You can store in variable or directly print in console :
```
print(wcapi.get("products").json())
print(wcapi.get("products/13").json())
```