

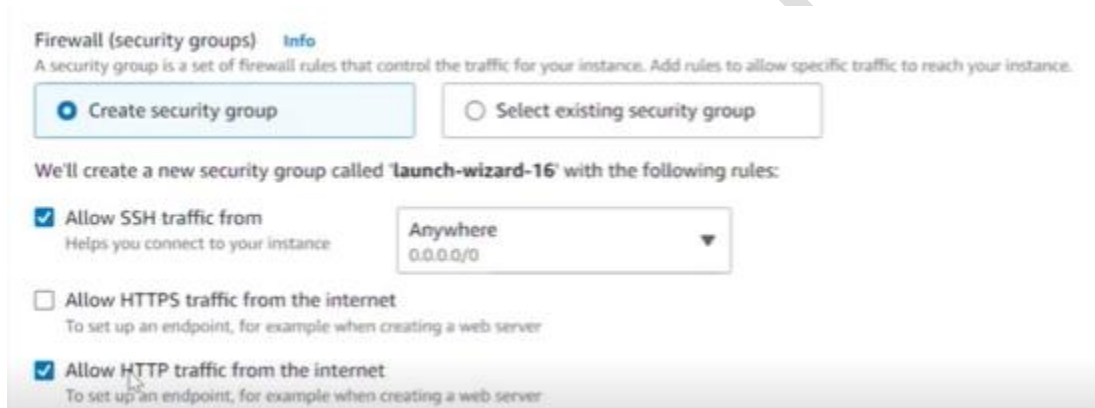
## AWS Cloud Session -3

Summary -28-02-2024



- **Website setup or web setup via EC2 instance.**

- You can set up security via **firewall** options just allow the traffic from the Internet.



- Login in root(admin) via **sudo su -root**.



- 
- Create a file using **vim <file-name>.php**
- Put your PHP code inside the file.

```
<?php
print("Welcome to LW");
?>

-- INSERT --
```

- To run this code we need an interpreter for this PHP code we have PHP interpreter.
- Using **yum** command you can install **php interpreter**.

```
[root@ip-172-31-40-56 ~]# yum install php
```

- Now to set up the Web server we require software for the Web server which is HTTPD using the yum command we can install HTTPD software. This software also known as Apache Web server
- **Yum install httpd.**

```
[root@ip-172-31-40-56 ~]#
[root@ip-172-31-40-56 ~]# yum install httpd
```

- To start the services use **systemctl start httpd** command.

```
[root@ip-172-31-40-56 ~]# systemctl start httpd
[root@ip-172-31-40-56 ~]#
```

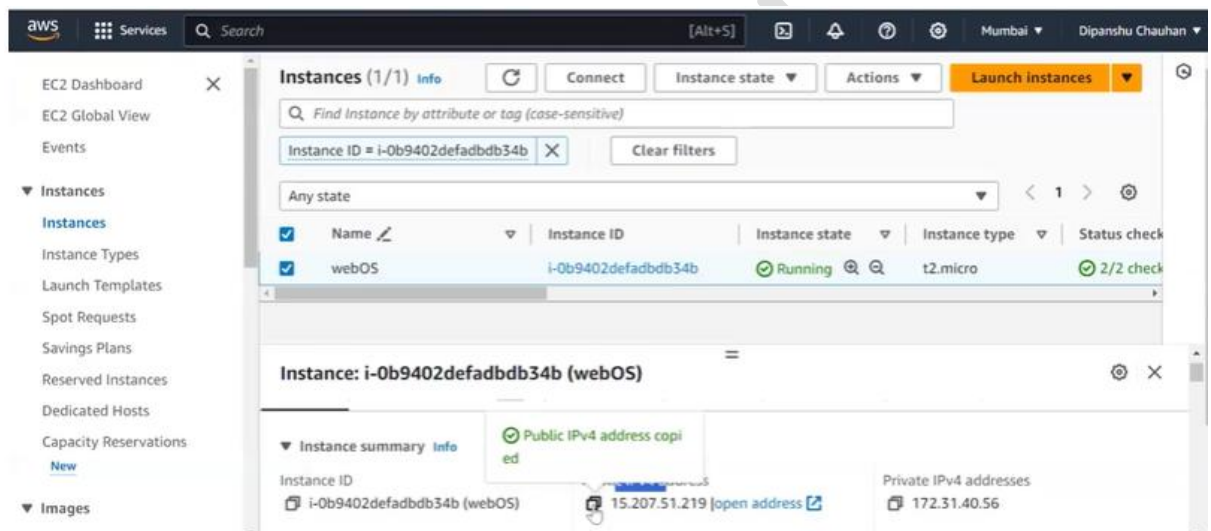
- Copy the page you created **/var/www/html/** folder.

```
[root@ip-172-31-40-56 ~]# cp my.php /var/www/html/index.php
[root@ip-172-31-40-56 ~]# cd /var/www/html/
[root@ip-172-31-40-56 html]# ls
index.php
[root@ip-172-31-40-56 html]# cat index.php
<?php

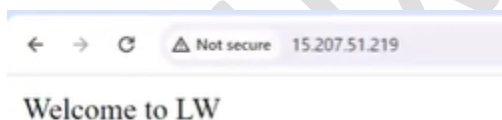
print("Welcome to LW");

?>
[root@ip-172-31-40-56 html]#
```

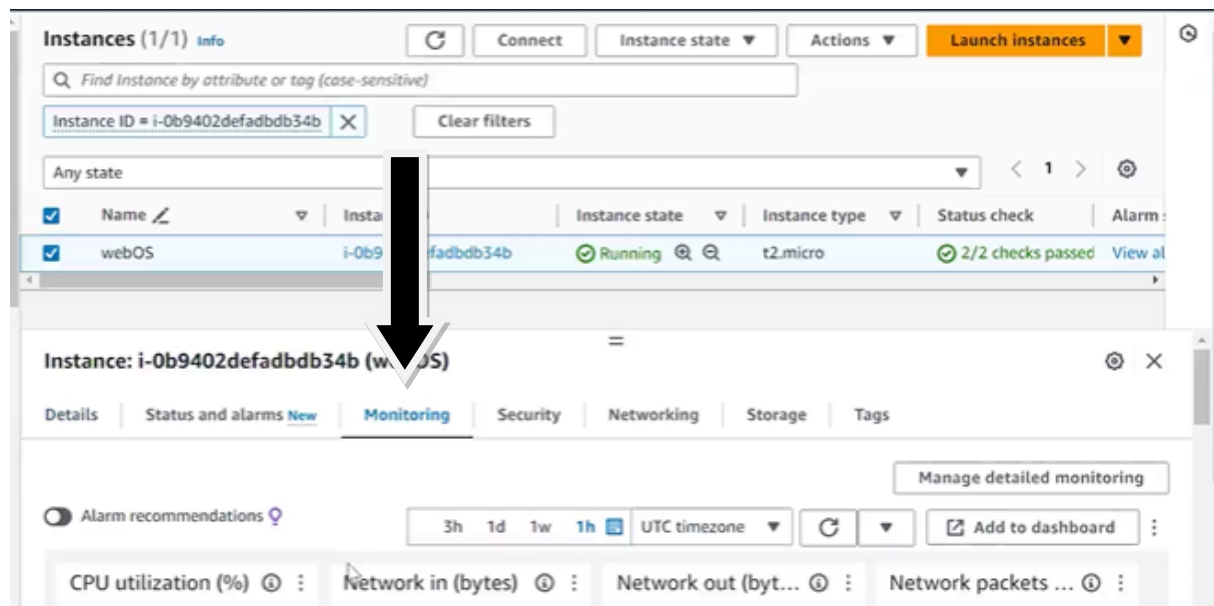
- Using the IP of your instance you can see your webpage.



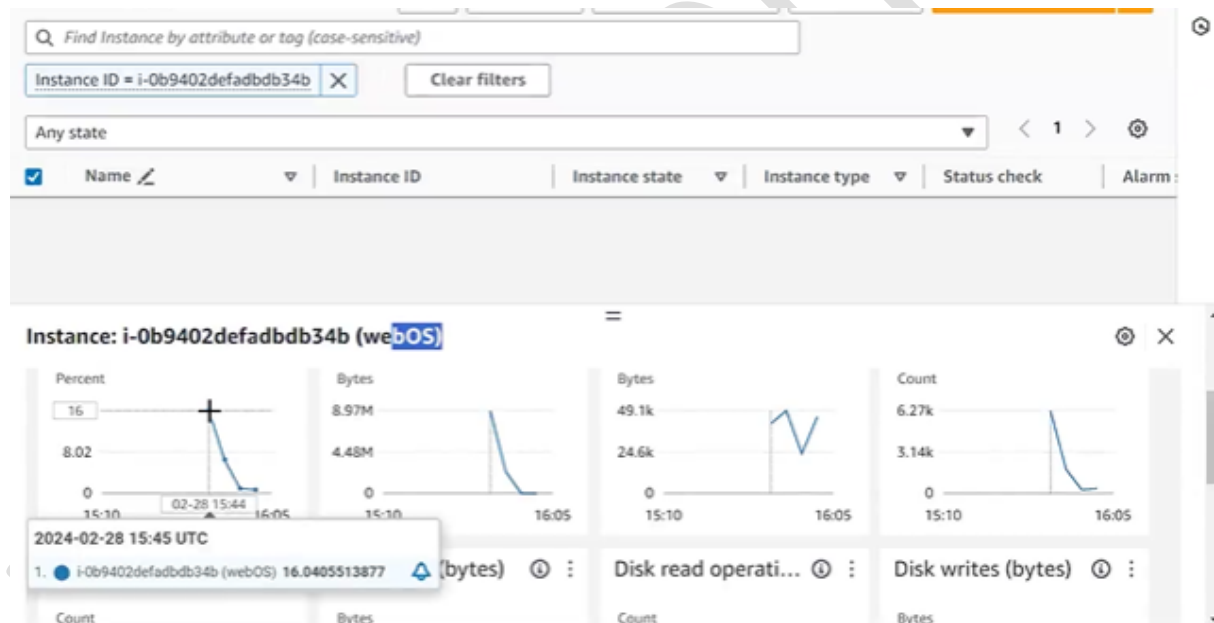
- Copy your instance IP and paste it into the Browser. **http:// <instance IP>**



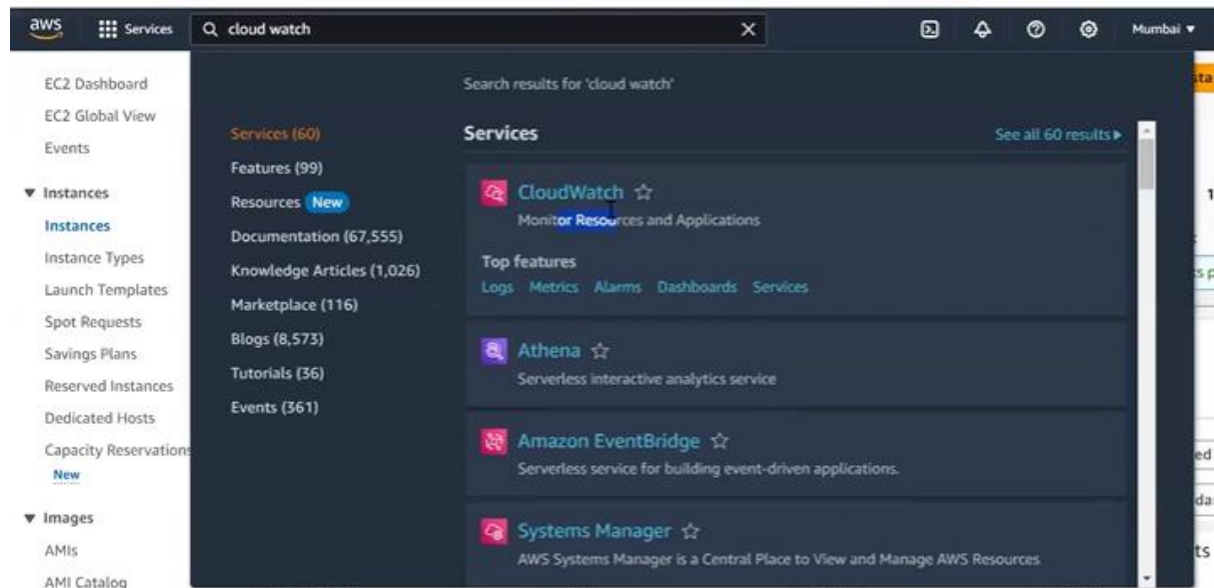
- Cloudwatch is one service that monitors AWS EC2 instances.



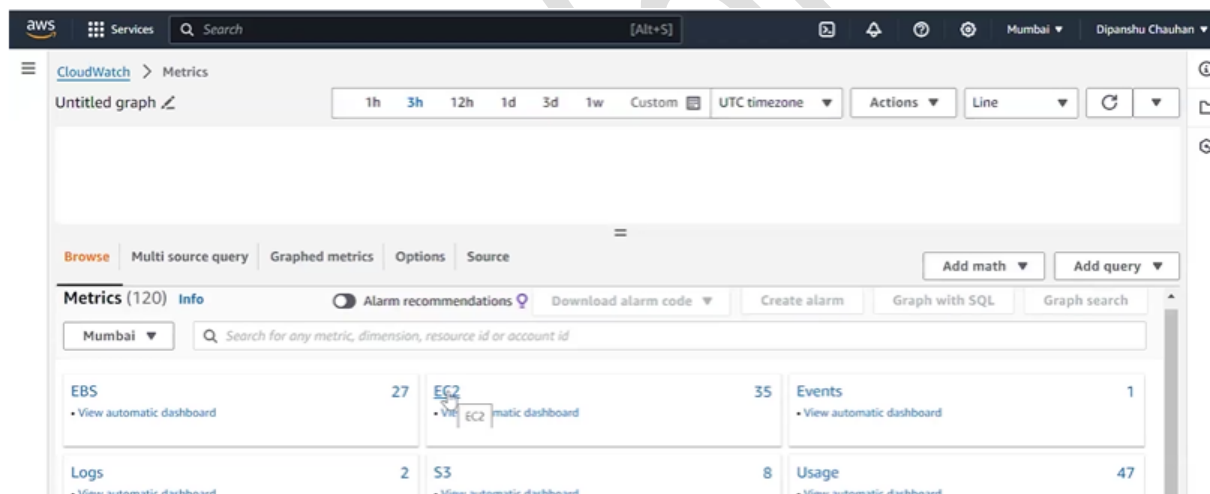
- Click on the monitoring option you will see the details of your instance.



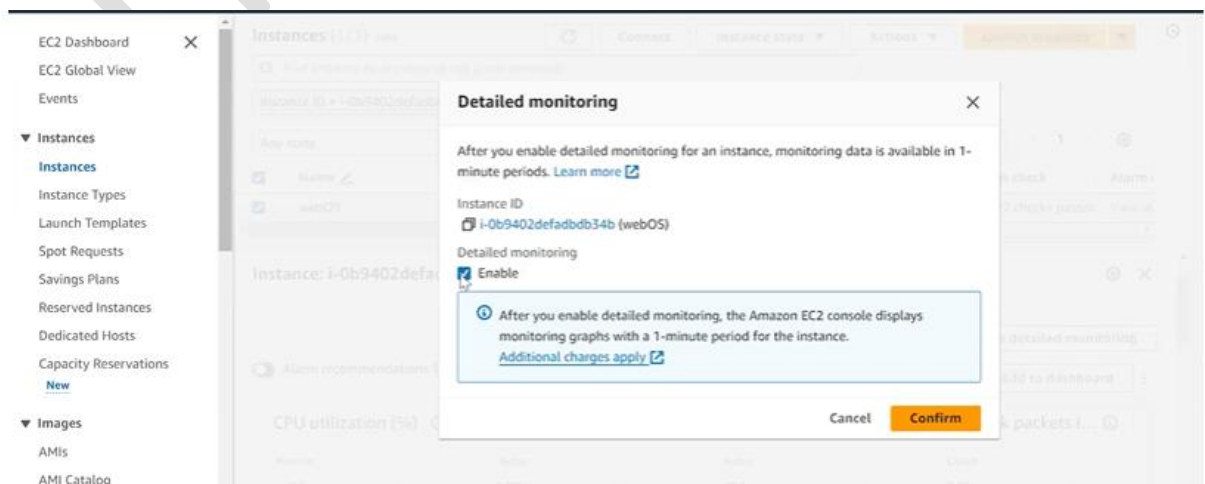
- All information comes from the cloudwatch.
- Go to the search option and search for the cloud watch.



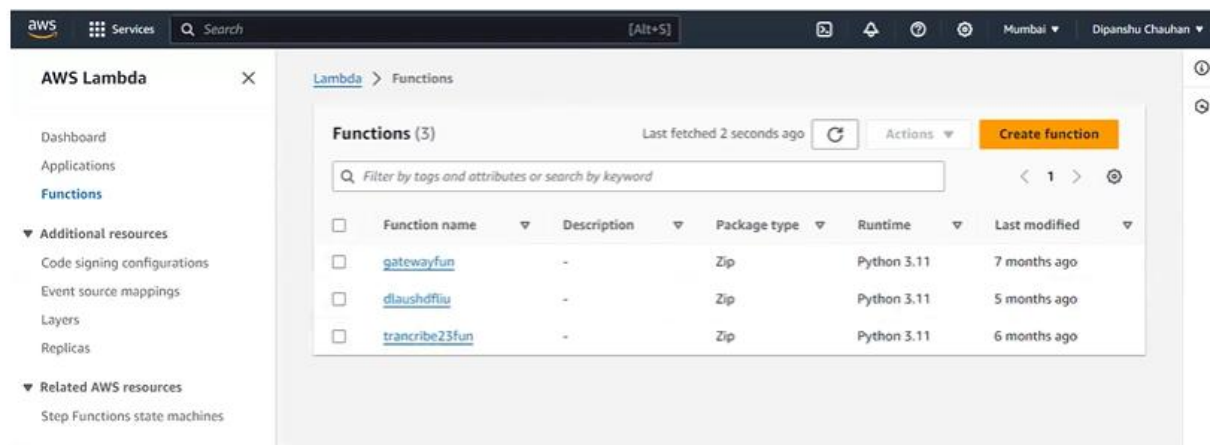
- In the cloud watch go to the metrics and in the metrics, you will see lots of services are monitored by the metrics.



- You can enable detail monitoring but it will charge and one benefit of this is it will give every minute status of your instance.



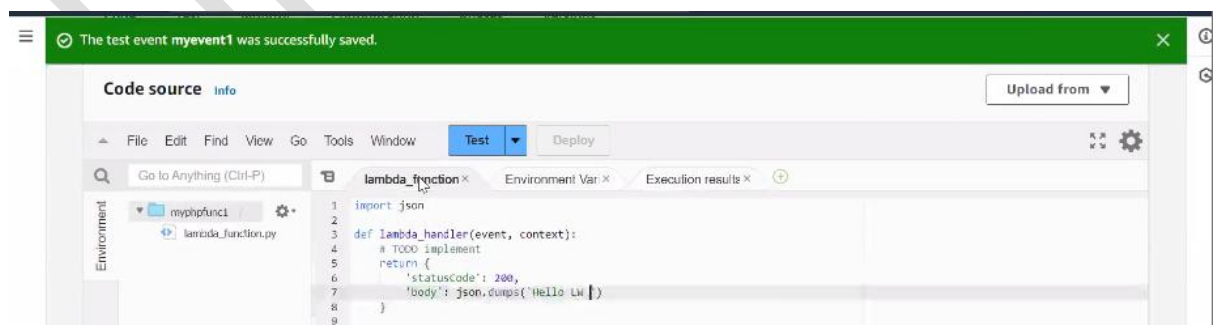
- The same PHP code we can run via Lambda.
- Go to AWS lambda and click on the create function.



- Give a function name and select the languages.

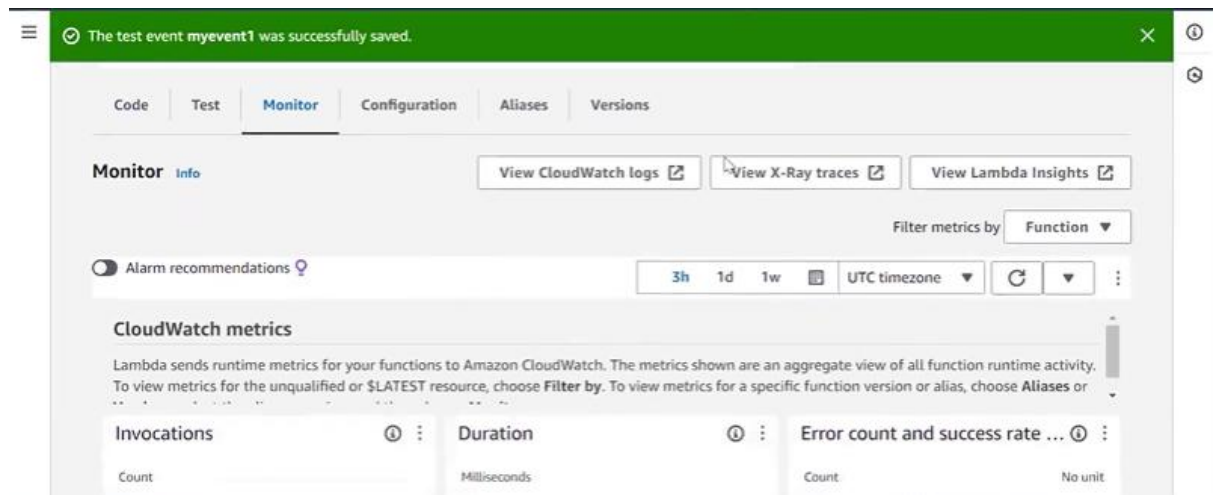
This screenshot displays the 'Basic information' section of the AWS Lambda console. It includes several configuration fields: 'Function name' with the value 'myphfunc1', 'Runtime' set to 'Python 3.12', and 'Architecture' set to 'x86\_64'. There are also links for 'Info' and 'Permissions' sections. The 'Permissions' section mentions that by default, Lambda will create an execution role with permissions to upload logs to Amazon CloudWatch Logs.

- Now go to the source code and write code, then click on test it will compile and run.

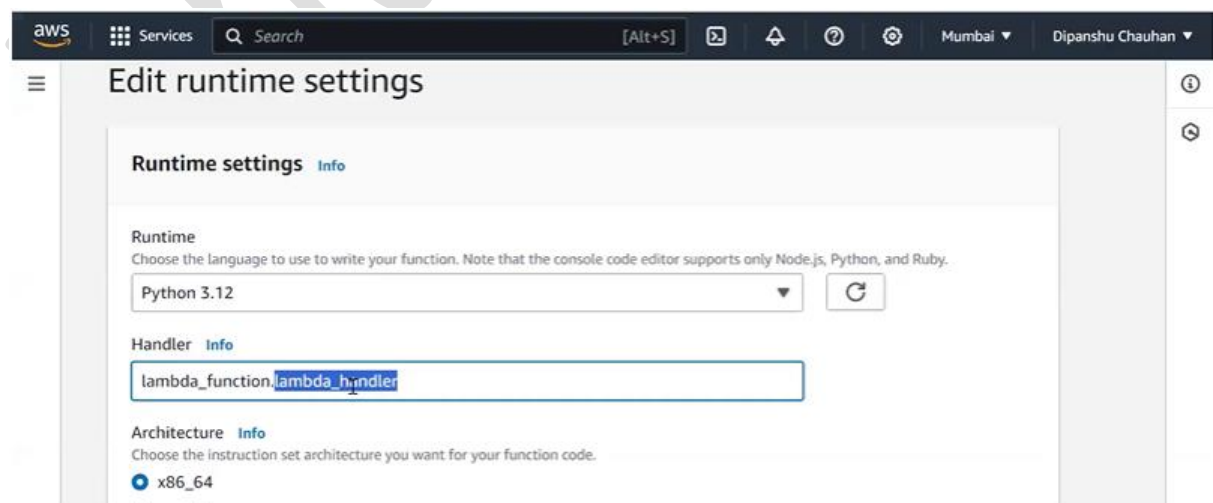
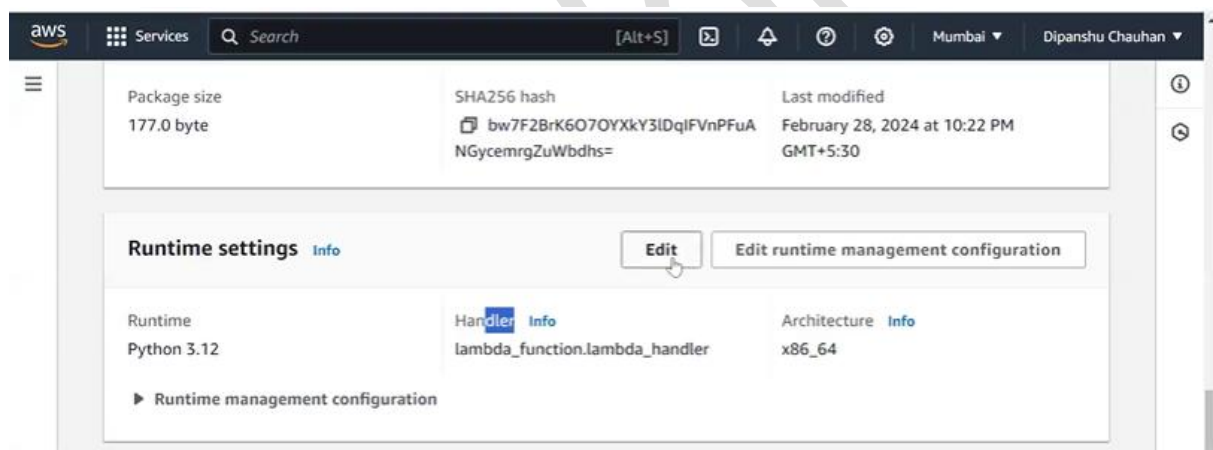


- The difference between an online compiler or interpreter and lambda is that in other compilers we have limits to run the code but in Lambda we can run our code unlimited times.

- Cloudwatch monitors the lambda in the **monitoring** option you can see details.

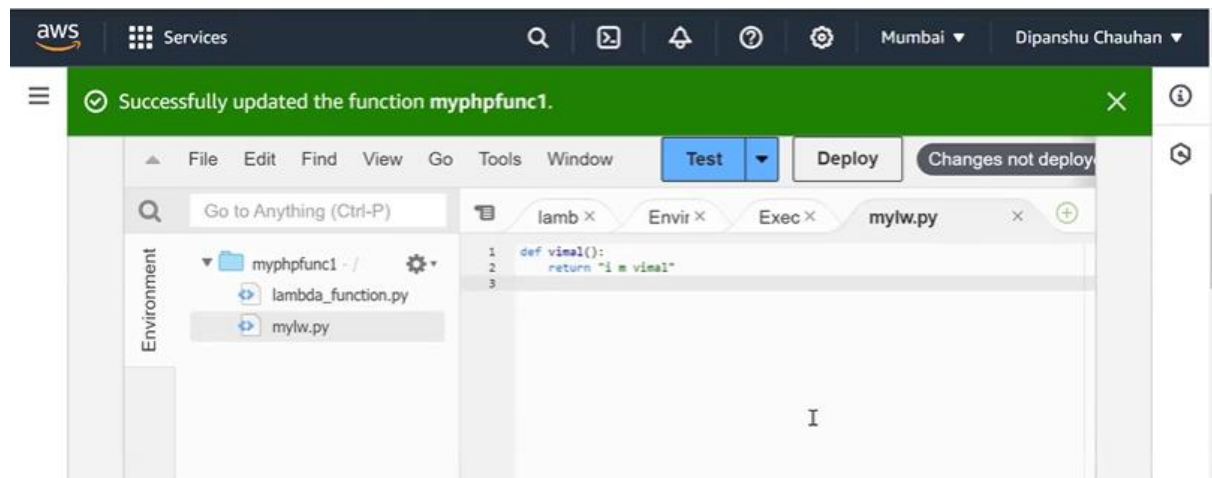


- Click on lambda function and scroll down you will see the **runtime setting** click on **Edit**, where you can give your function name.





- On the left side of the lambda function, we have a folder option where you can create multiple files for our code.



- In one lambda function, you can put multiple program files.