Page No.
Date

Practical No. 1

* Title :: Case Study

* Date of Completion ::

* Objective :: To study about Amazon EC2 and its importance.

* Problem Statement :: Case Study on Amazon EC2 and learn about Amazon EC2 web services.

* Theory ::

Amazon EC2 or Amazon Elastic Compute Cloud is one of Amazon web services well known service.
It offers business ability to ran applications on the public cloud and providing secure, reliable & resizable compute capacity in the cloud.
It greatly eases the process of sizing or scaling up & down. It can be integrated into several other services and comes within a plan where you only pay for how much you use it.

Teacher's Signature

Page No.
Date

☆ Use Case :=

Notifying users about newsletter :-
Amazon Simple Notification Sevice, EC2 and Simple Storage (S3), can together do the task of notifing users about each new newsletter.

Steps :

A) Create an AWS account

B) Set up EC2 instance =>

a) An EC2 instance is a virtual server in Amazon EC2. Amazon provides various types of instances with different configurations of CPU, memory, storage and networking resources. Instances can be created from Amazon Machine Images (AMI).
An AMI is a template that creates new instances of VM. It contains information about software, OS, volume and access permission. Two types of AMIs are
1) Pre-defined AMIs
2) Custom AMIs

b) ~~Creation~~ Choosing an instance type =>
An instance type specifies the hardware specification that are required in the machine from

Teacher's Signature

the previous step. There are 5 main types of instance.

1) Computer optimized
2) Memory optimized
3) GPU optimized
4) Storage optimized
5) General purpose.

c) Configure instance specifying number of instances, purchasing options, kind of network subnet, assign a public IP, shutdown behaviour i.e. stopping or terminating, etc.

d) Adding Storage = The type of storage that can be added are
1) Ephemeral Storage (temporary)
2) Amazon Elastic Block Store (permanent)
3) Amazon S3.
Size of the storage in GB, volume, type, location of disk, and whether volume needs to be encrypted has to be specified.

e) Adding tags = This helps to identify instances more quickly.

f) Configuring security groups = Specify rules based on which users are given access to the instance, type of security, protocol etc. has to be specified.

Teacher's Signature

Page No.
Date

g) Review = Instance is created by launching.

C) Create SNS and a Topic.

D) Make sure Topic is set to "Public".

E) Add subscribers.

F) Create an S3 bucket.

G) Setup event, relating it with SNS.

H) Sync S3 bucket and AWS instance.

This is how the users will be notified with each newsletter.

★ Conclusion :- We have learned about Amazon EC2 by studying the use case about how Amazon EC2 can be used in real time application.

Date

Practical No. 2

* Title :: Virtualization

* Date of Completion ::

* Objective :: To learn about virtualization using Google App Engine.

* Problem Statement :: Install and configure Google App Engine.

* Theory ::

App Engine is a fully managed, servetless platform for developing and hosting web applications. We can choose from several popular languages, libraries and frameworks, to develop our apps, and then let App Engine take care of provisioning servers and scaling your app instances based on demand.
Google allows us to add our web application code to the platform while managing the infrastructure for us. The engine ensures that our web app are secure and running and saves them from malware & threats by enabling the firewall.
Google app engine is a Platform as a Service (PaaS) solution that makes deployment easier.

Teacher's Signature_____

Page No.
Date

☆ Installing & Configuring Google App Engine :-

A) Run the following command :-
gcloud init.

B) Accept the option to login using your Google user account :-
To continue, you must login. Would you like to login (Y/N)? Y

C) In your browser, login to your Google user account when prompted and check Allow to grant permission to access google cloud platform resources.

D) At the command prompt, select a cloud platform project from the list of those where you have Owner, Editor or Viewer permission.
Pick cloud project to user
1) [My-project-1]
2) [My-project-2]
Please enter your numeric choice :-
If you only have one project, gcloud init selects it for you.

E) If you have Google Compute Engine API enabled, gcloud init allow you to choose a default compute engine zone :-
1) [asia-east 1-a]

Teacher's Signature _____

Page No.
Date

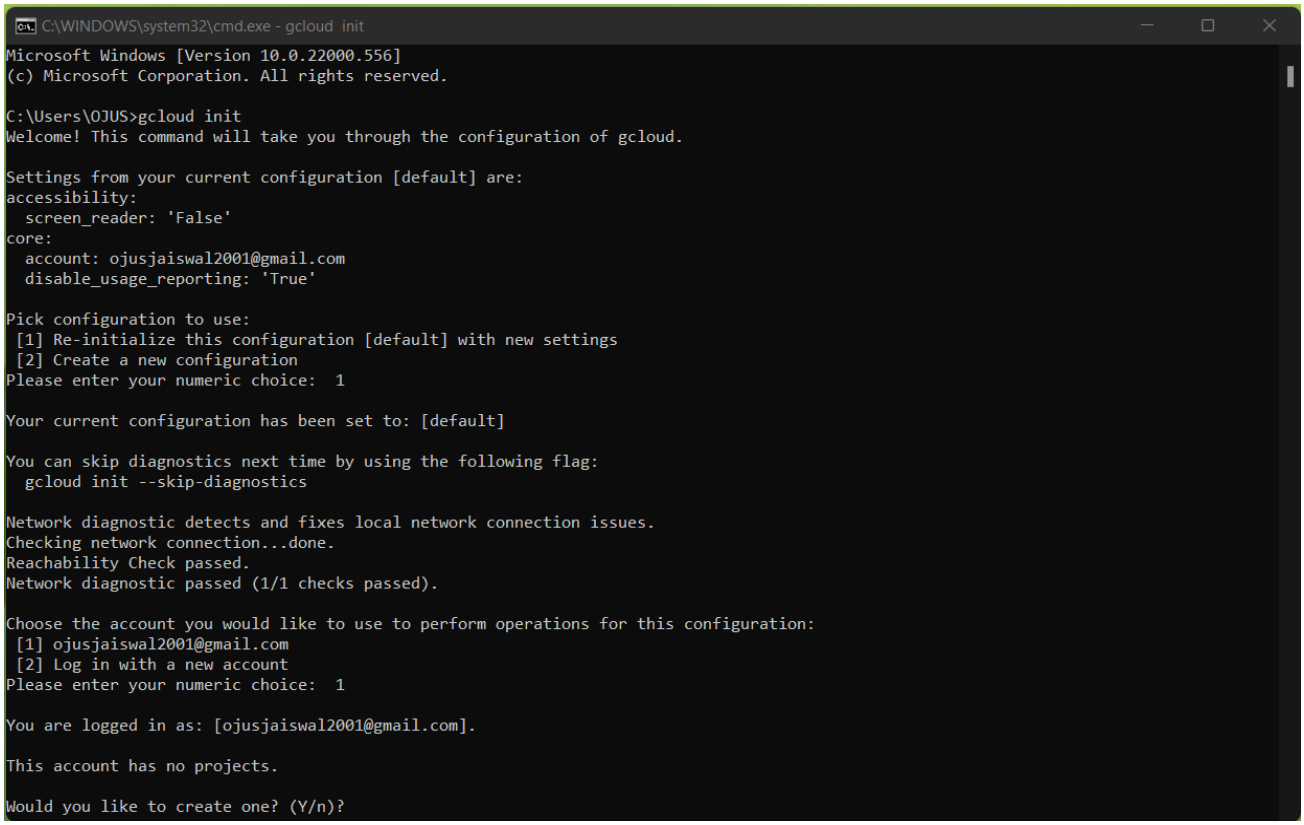
2) [asia-east 1-b]
:
14) Do not use default zone
Please enter your numeric choice :-
gcloud init confirms that you have complete the setup steps successfully.
gcloud has now been configured!

We can use [gcloud config] to change more gcloud settings.
Your active configuration is [default].

* Conclusion :- We studied how to install and configure the Google App Engine.

Practical No. 2

Output :-



Page No.
Date

Practical No. 3

☆ Title :: SalesForce and Apex programming languages.

☆ Date of Completion ::

☆ Objective :: Creating application in Apex programming language.

☆ Problem Statement :: Creating an Application in SalesForce.com using Apex programming language.

☆ Theory ::

A) SalesForce :-

SalesForce is a Software as a Service (SaaS) cloud computing company that specializes in customer relationship management (CRM). SalesForce's services allow businesses to use cloud technology to better connect with customers, partners and potential customers.

It's an app development platform that extends your CRM's reach and functionality. You do not have to be developer to build apps using the SalesForce platform.

1) Cross functional insights and reporting.
2) Additional data dashboards.
3) Customers centric automation
4) Proactive customer interactions

Teacher's Signature _____

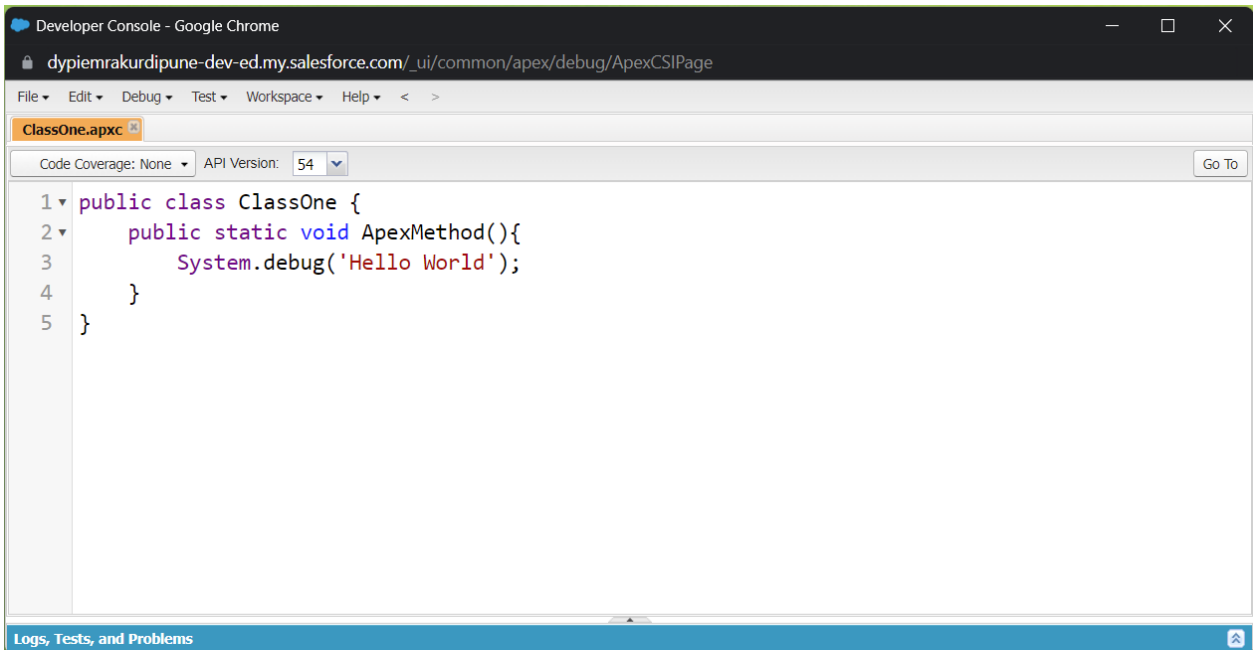
5) Optimized process
6) Simplified collaboration

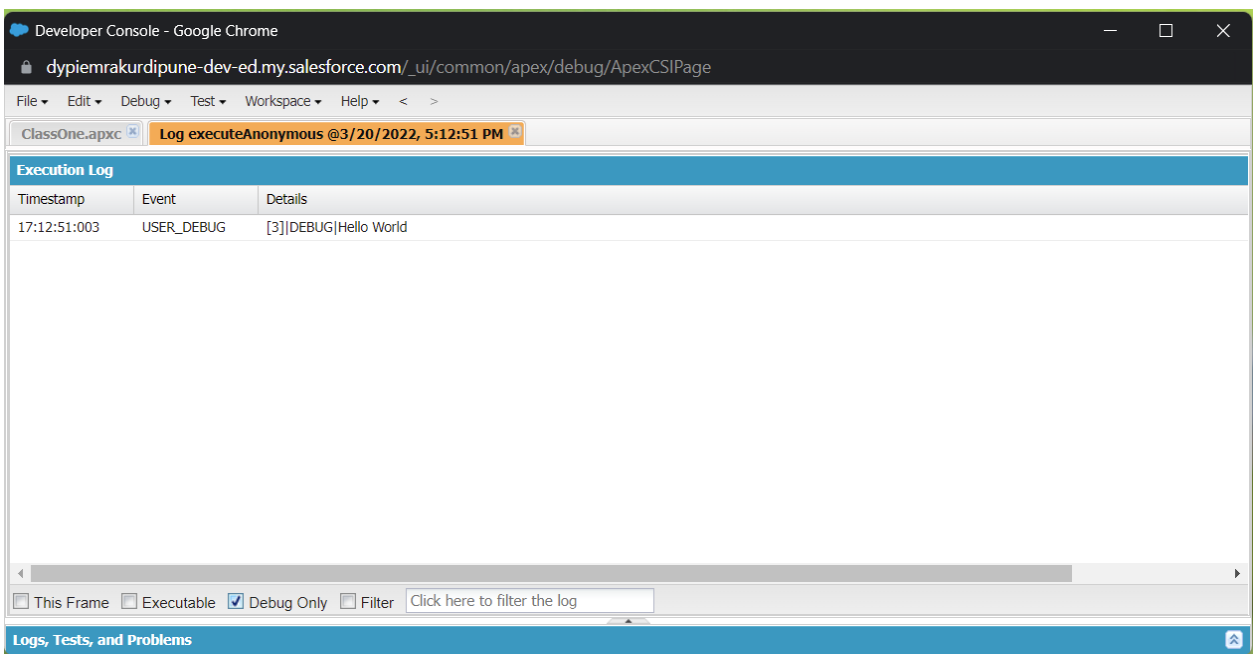
B) Apex Programming :-
Apex is a programming language which is proprietory and developed by SalesForce.com. It is a strongly typed, object oriented programming language that allows developers to execute flow and transaction control statements on the SalesForce.com platform serves in conjunction with calls to SalesForce.com API.

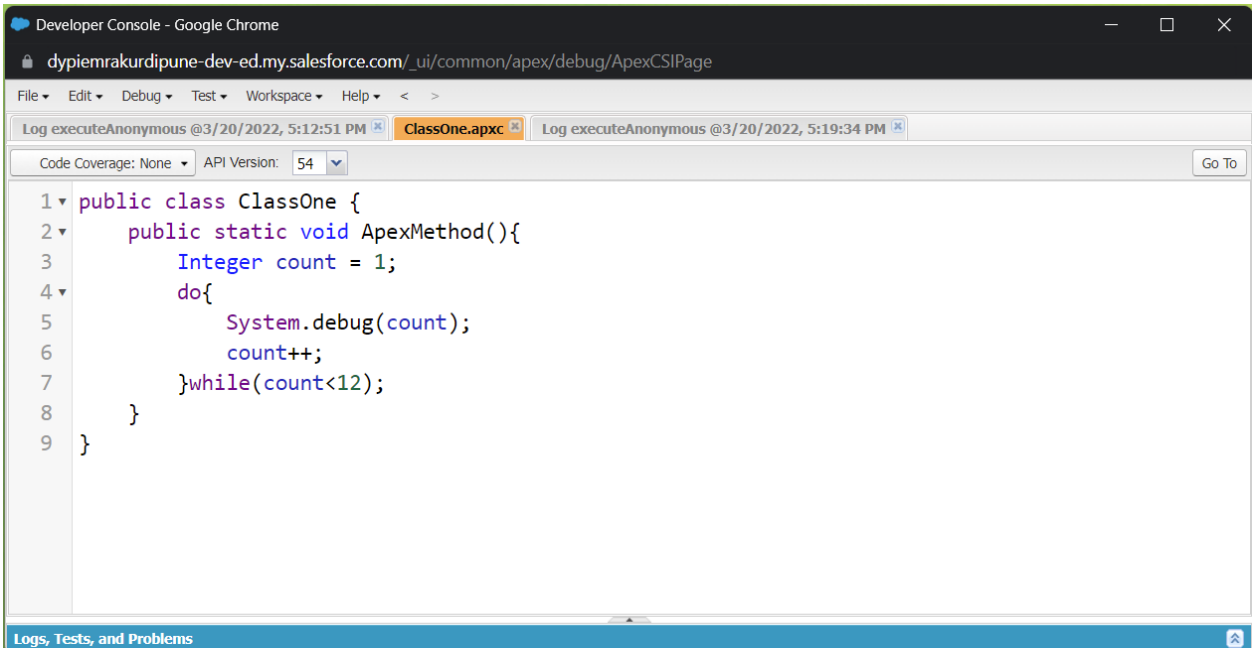
☆ Conclusion :: We studied about Apex programming to create programs and execute it using the SalesForce edition tool.

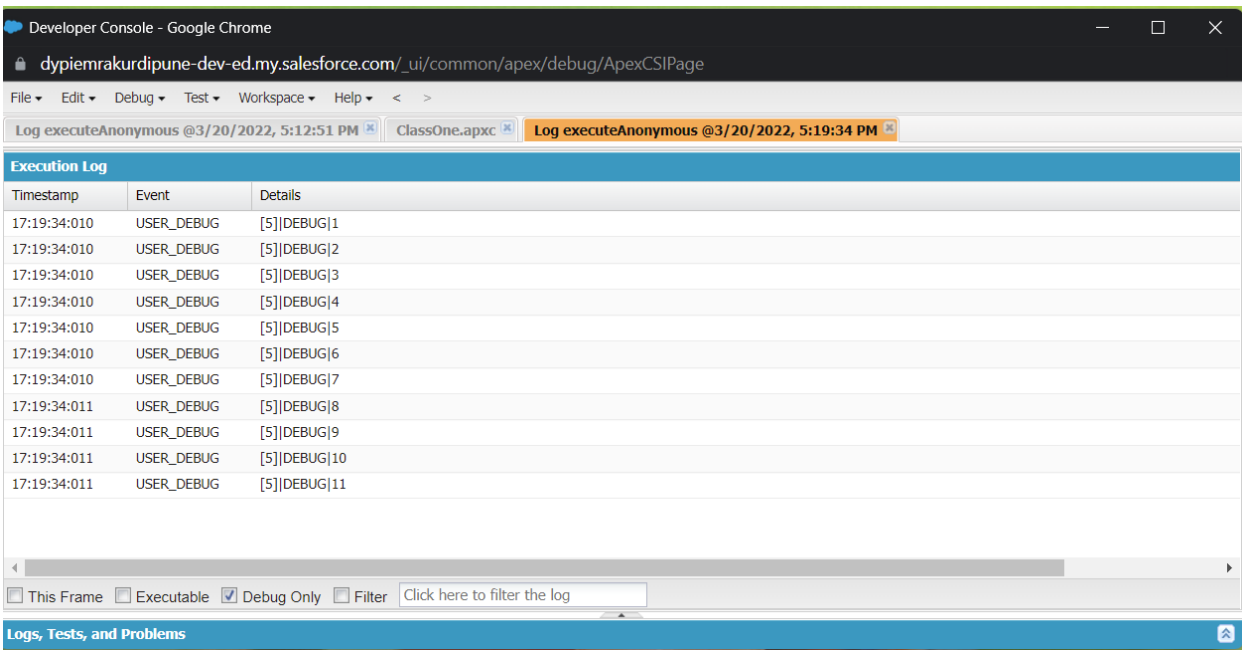
Practical No. 3

Output :-






Developer Console - Google Chrome
dypiemrakurdipune-dev-ed.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File Edit Debug Test Workspace Help
Log executeAnonymous @3/20/2022, 5:12:51 PM
ClassOne.apxc
Log executeAnonymous @3/20/2022, 5:19:34 PM
Code Coverage: None
API Version: 54
Go To
public class ClassOne {
public static void ApexMethod(){
Integer count = 1;
do{
System.debug(count);
count++;
}while(count<12);
}
}
Logs, Tests, and Problems


Developer Console - Google Chrome
dypiemrakurdipune-dev-ed.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File Edit Debug Test Workspace Help
Log executeAnonymous @3/20/2022, 5:12:51 PM
ClassOne.apxc
Log executeAnonymous @3/20/2022, 5:19:34 PM
Execution Log
Timestamp Event Details
17:19:34:010 USER_DEBUG [5]|DEBUG|1
17:19:34:010 USER_DEBUG [5]|DEBUG|2
17:19:34:010 USER_DEBUG [5]|DEBUG|3
17:19:34:010 USER_DEBUG [5]|DEBUG|4
17:19:34:010 USER_DEBUG [5]|DEBUG|5
17:19:34:010 USER_DEBUG [5]|DEBUG|6
17:19:34:010 USER_DEBUG [5]|DEBUG|7
17:19:34:011 USER_DEBUG [5]|DEBUG|8
17:19:34:011 USER_DEBUG [5]|DEBUG|9
17:19:34:011 USER_DEBUG [5]|DEBUG|10
17:19:34:011 USER_DEBUG [5]|DEBUG|11
This Frame
Executable
Debug Only
Filter
Click here to filter the log
Logs, Tests, and Problems