Lab Programs 2

Working with AWS Account

Objectives

In this lab programs, you learn about

- How to create AWS Account
- How to filter the Free Tier Details
- How to identify AWS Pricing
- Estimate Price using Simple Monthly Calculator
- Estimate Price using TCO Calculator
- How to use Billing Dashboard

Prerequisites

Before working on this lab program, you must know

- How to browse Internet.
- About Hardware Components.
- About Software Components.

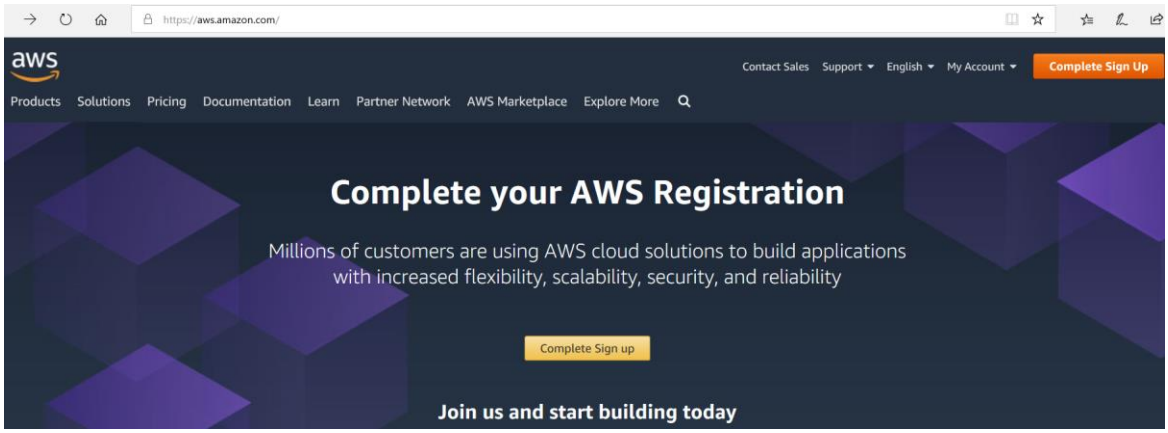
Estimated time to complete this lab programs: 150 minutes

❖ Lab Program 01

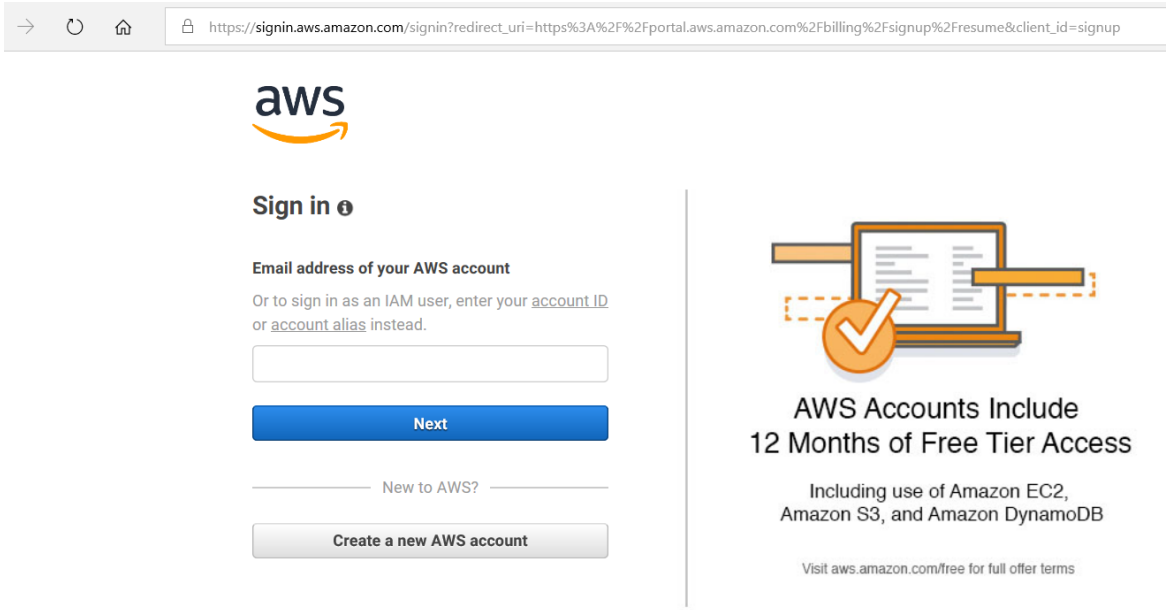
1. Open the Web Browser and type the below URL

   https://aws.amazon.com/

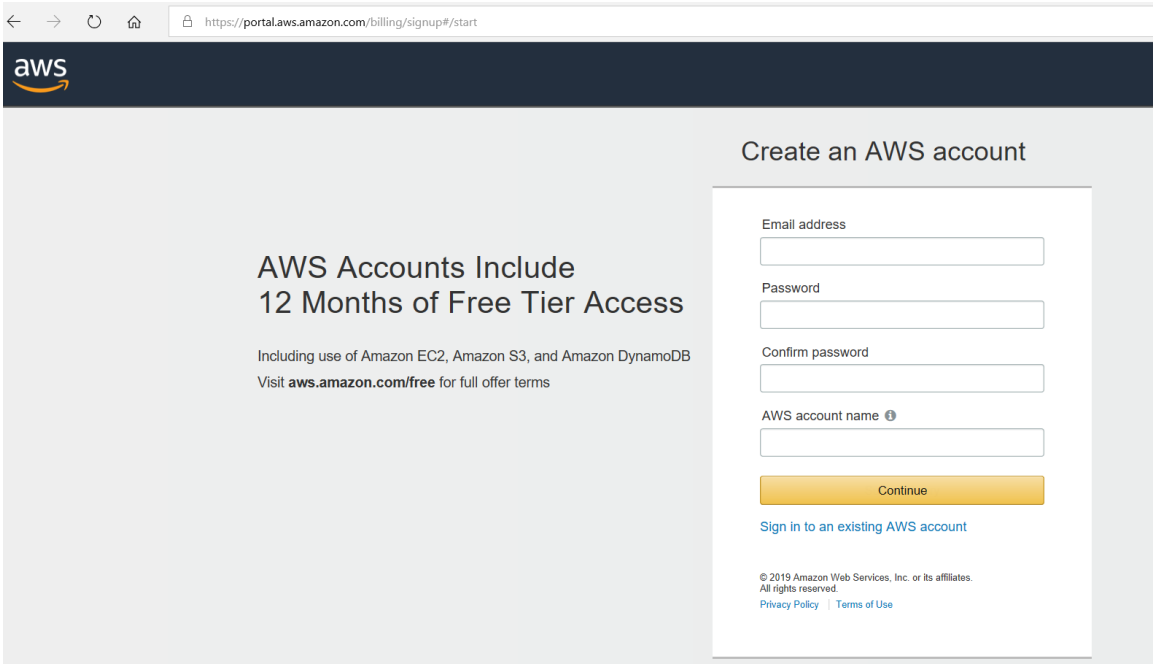
2. The above action opens the below web page



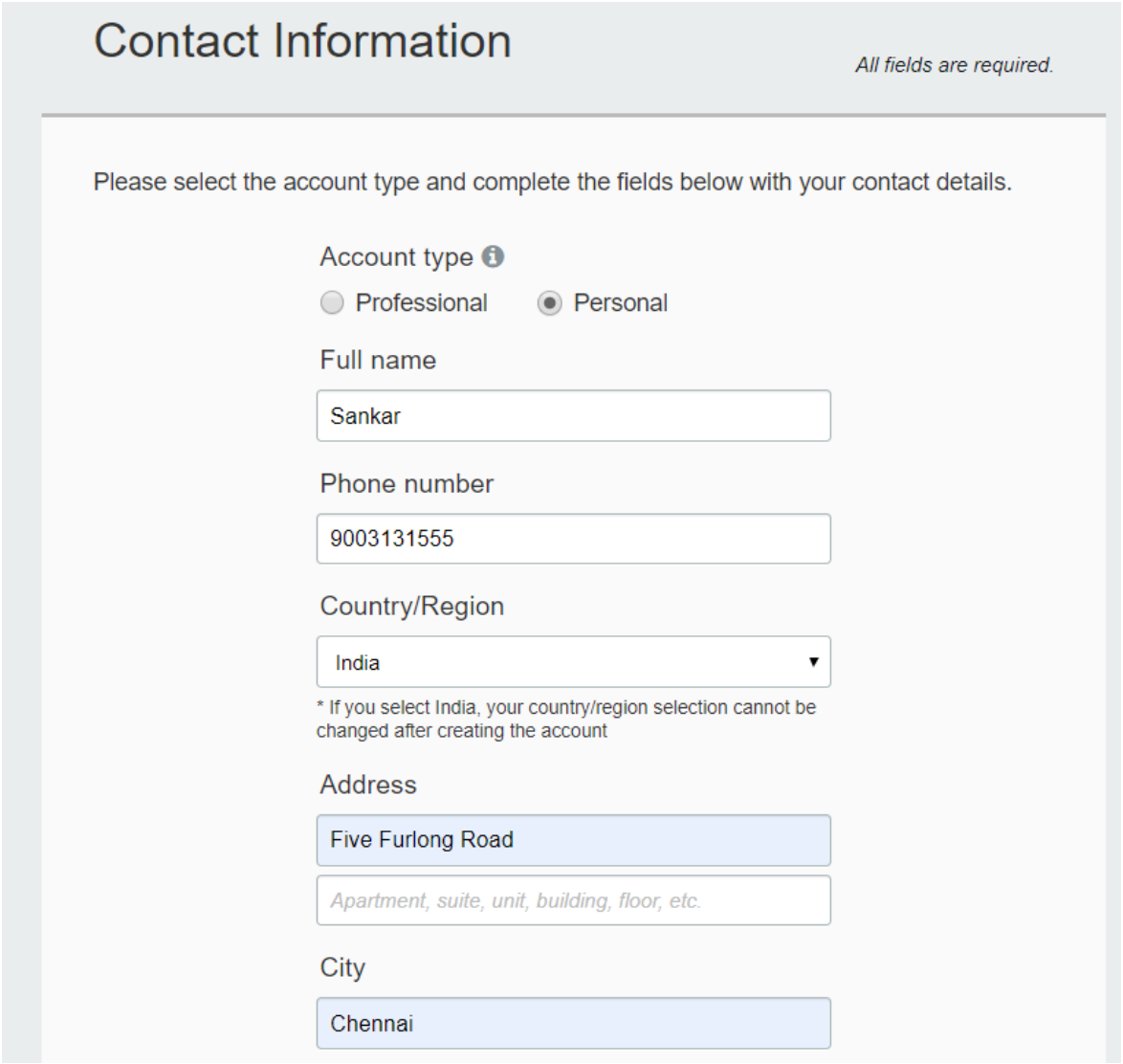
3. Click on **Complete Sign Up** in the above screen. This action brings the below web page

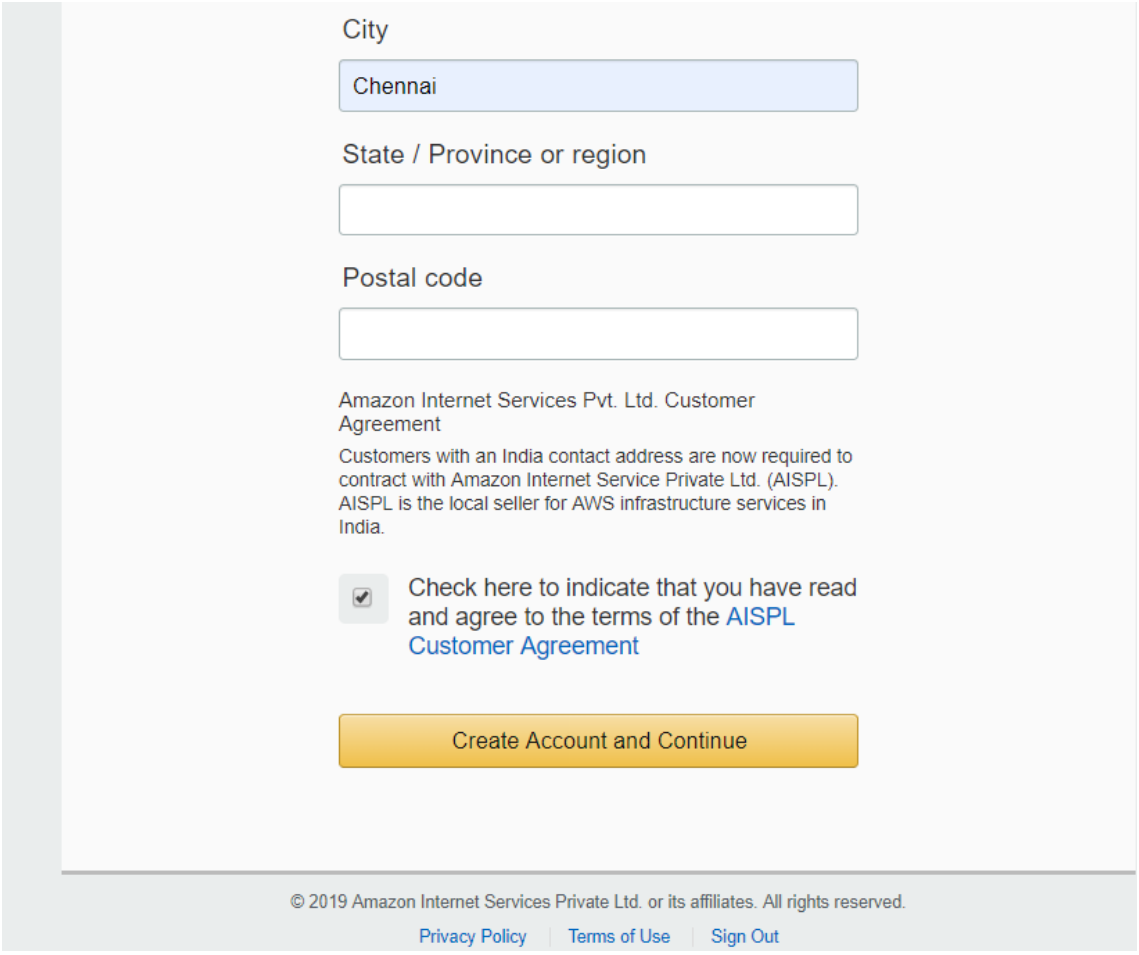


4. Click on **Create a new AWS account** in the above screen. This action brings the below web page

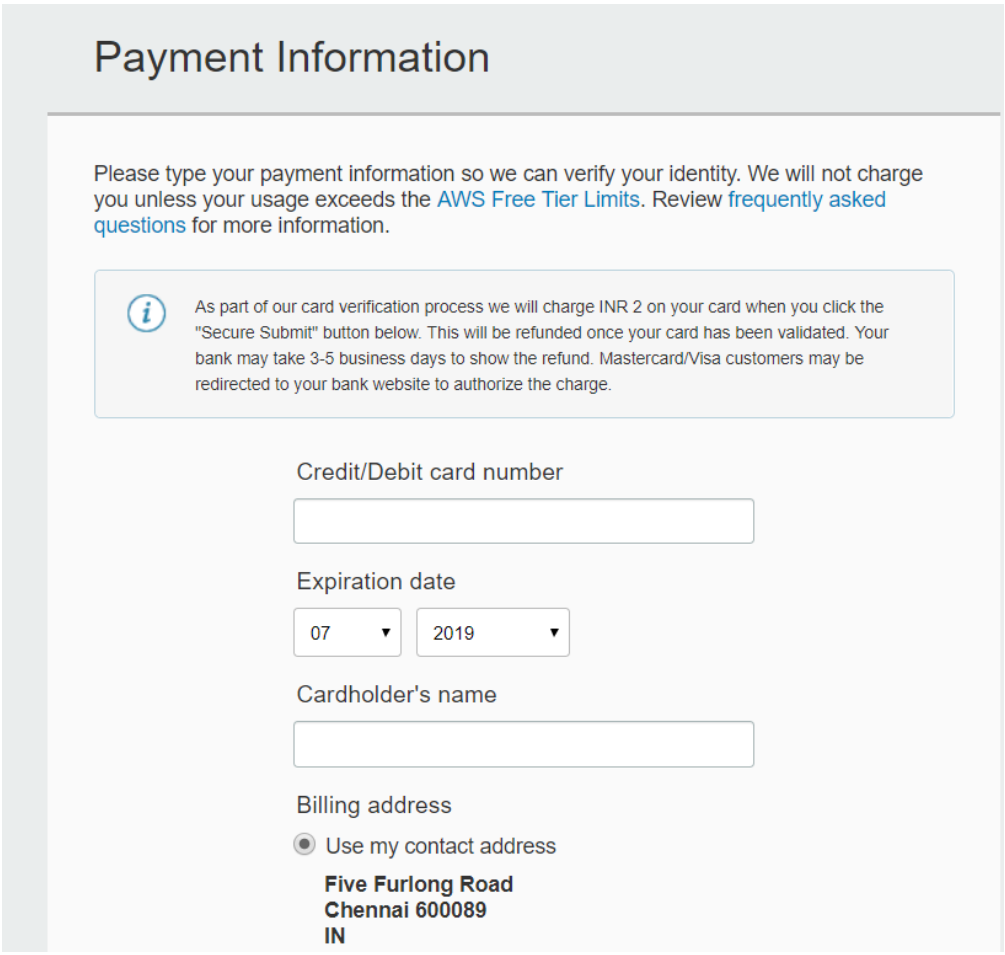


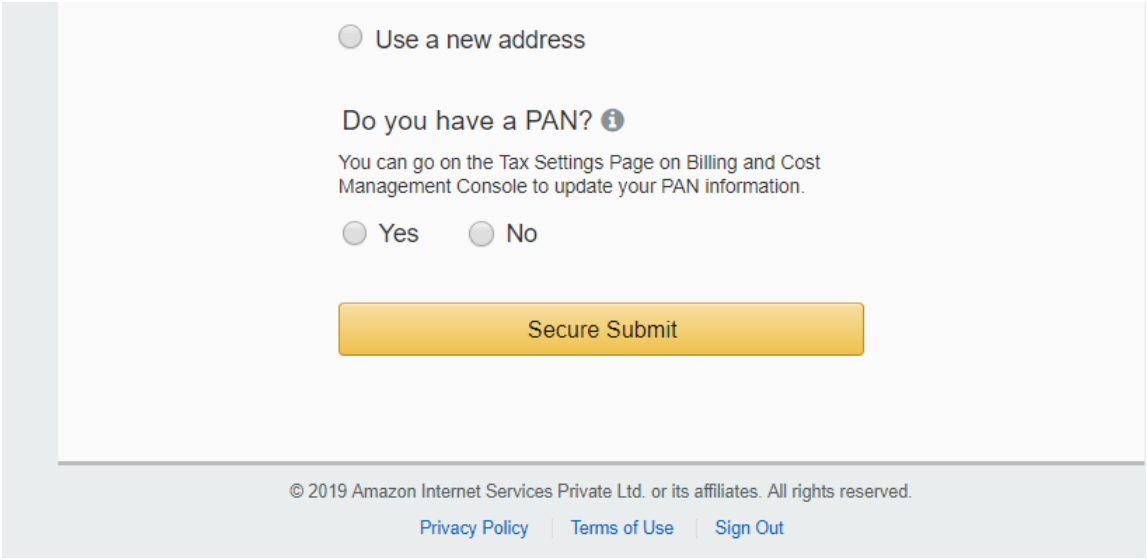
5. In the above screen, fill the necessary details. Then click **Continue**. This action brings the below screen.



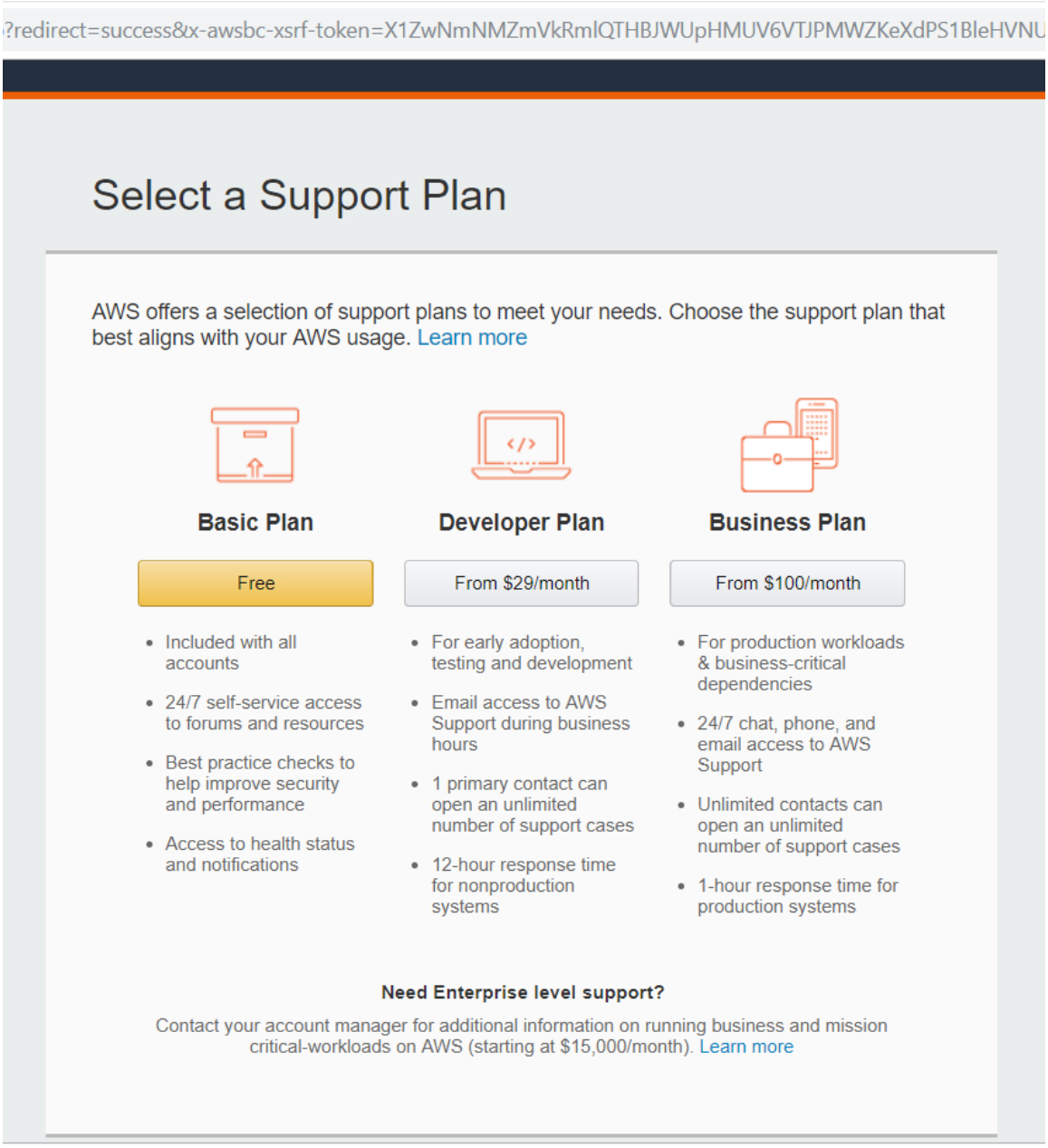


6. Select **Personal**. Fill remaining information. **Check** the **Agreement** checkbox. Click **Create Account and Continue**. This action brings the below screen.

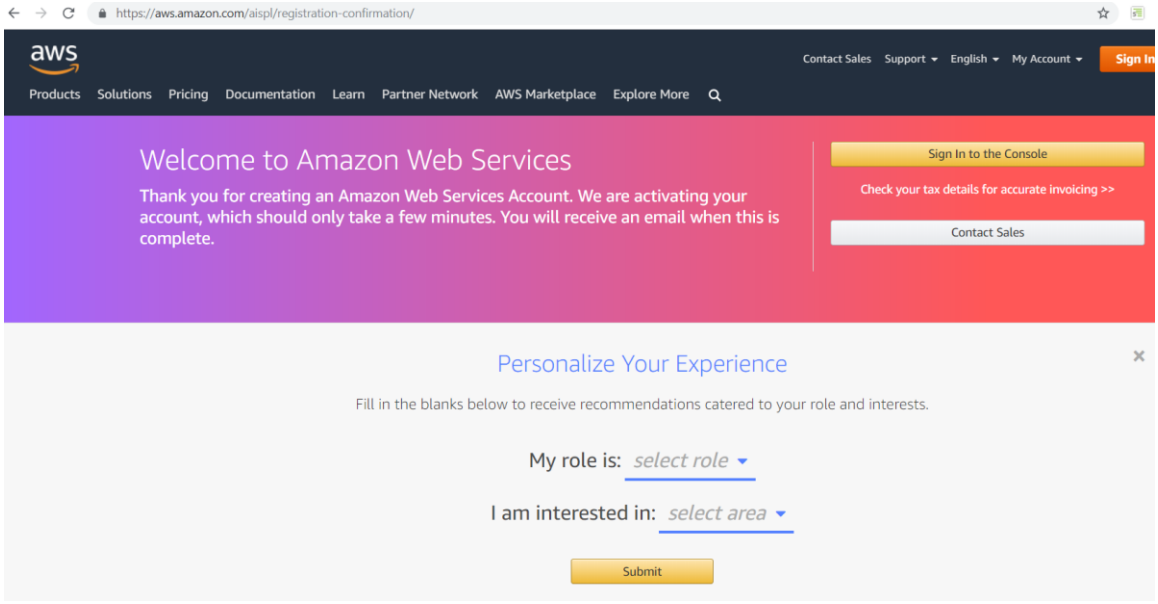




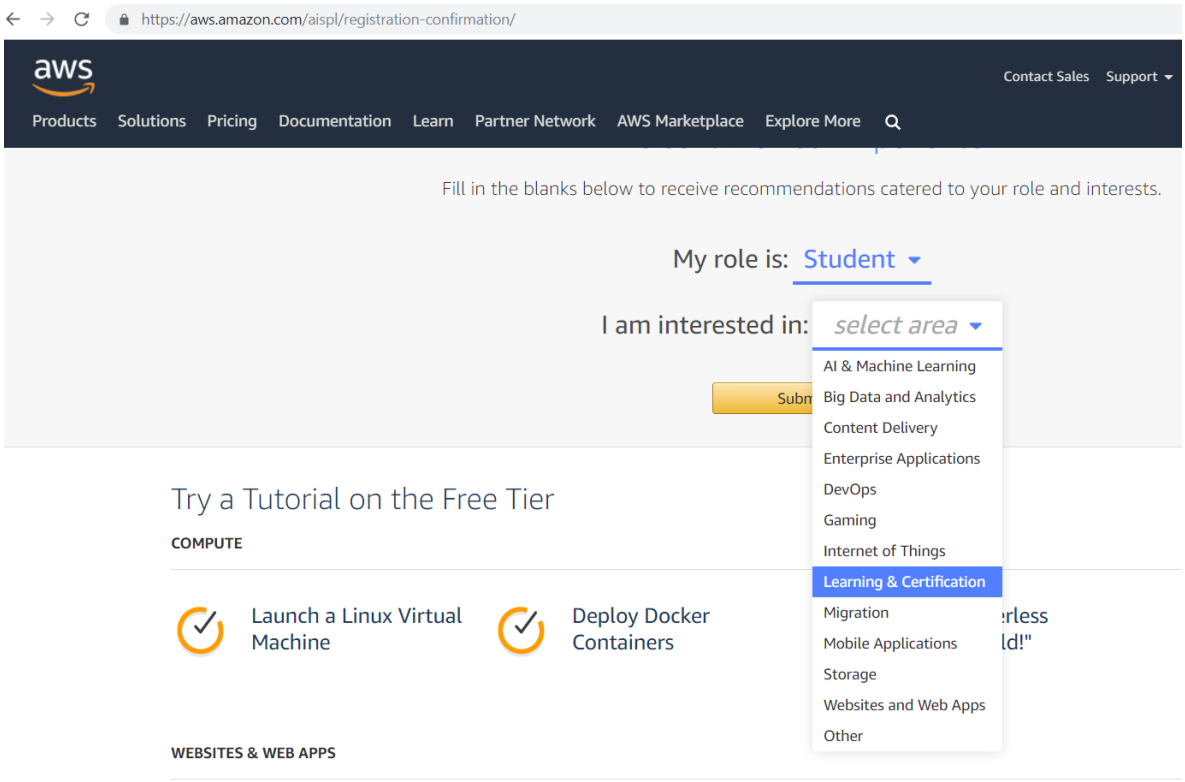
7. Fill the payment details. Click on **Secure Submit**. This action brings the below screen.

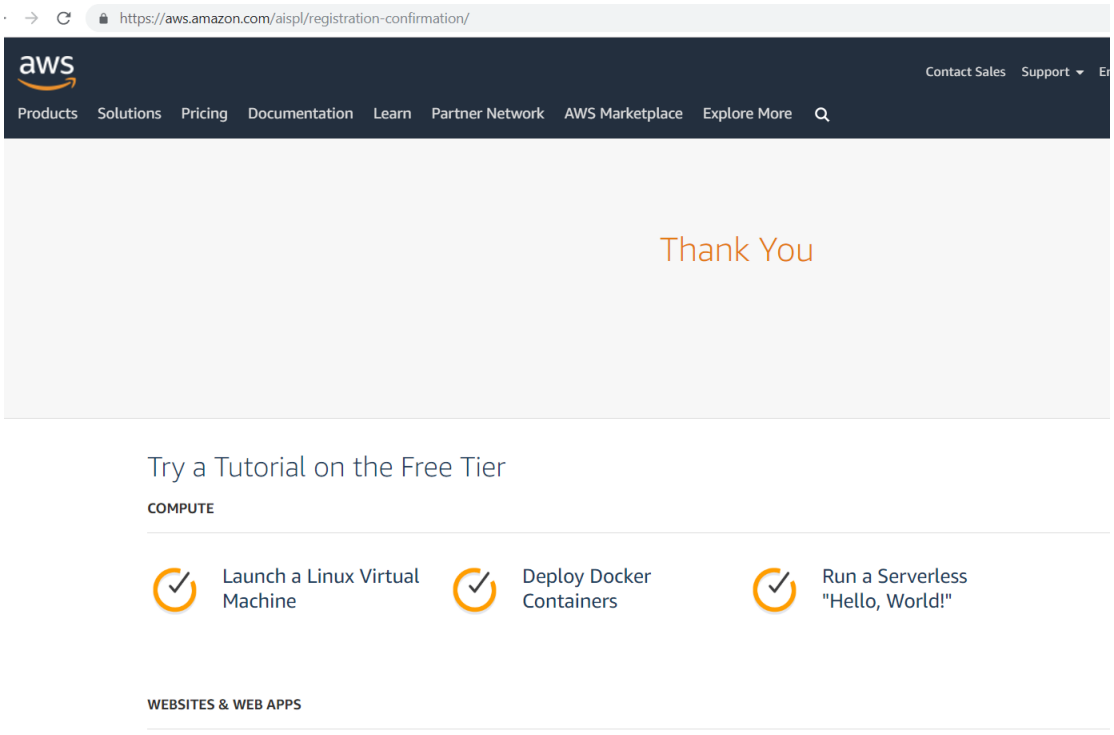


8. In the above screen, Click on **Free**. This action brings the below screen.



9. Click on the **Select Role** drop down. And select **Student**.
10. Click on **Select Area** drop down. And select **Learning & Certification**. Click Submit. This action brings the below screen





Program Output

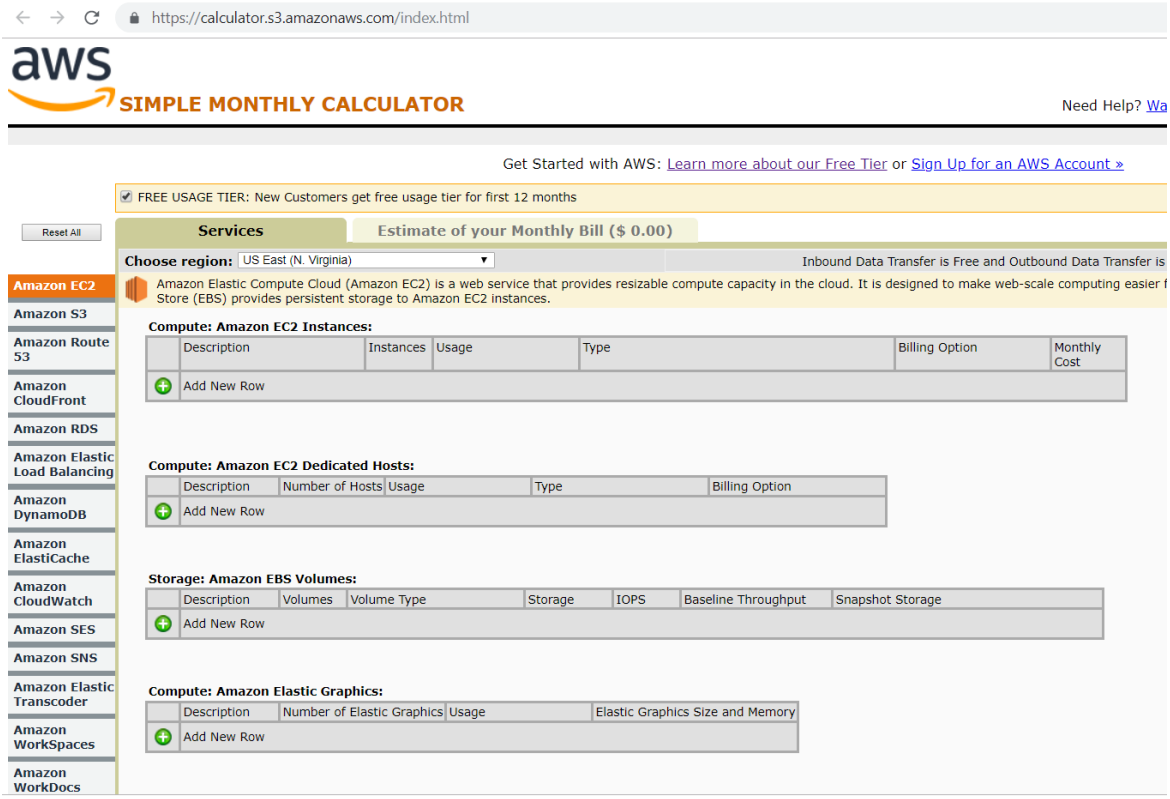
What you learnt from this program?

❖ Lab Program 02

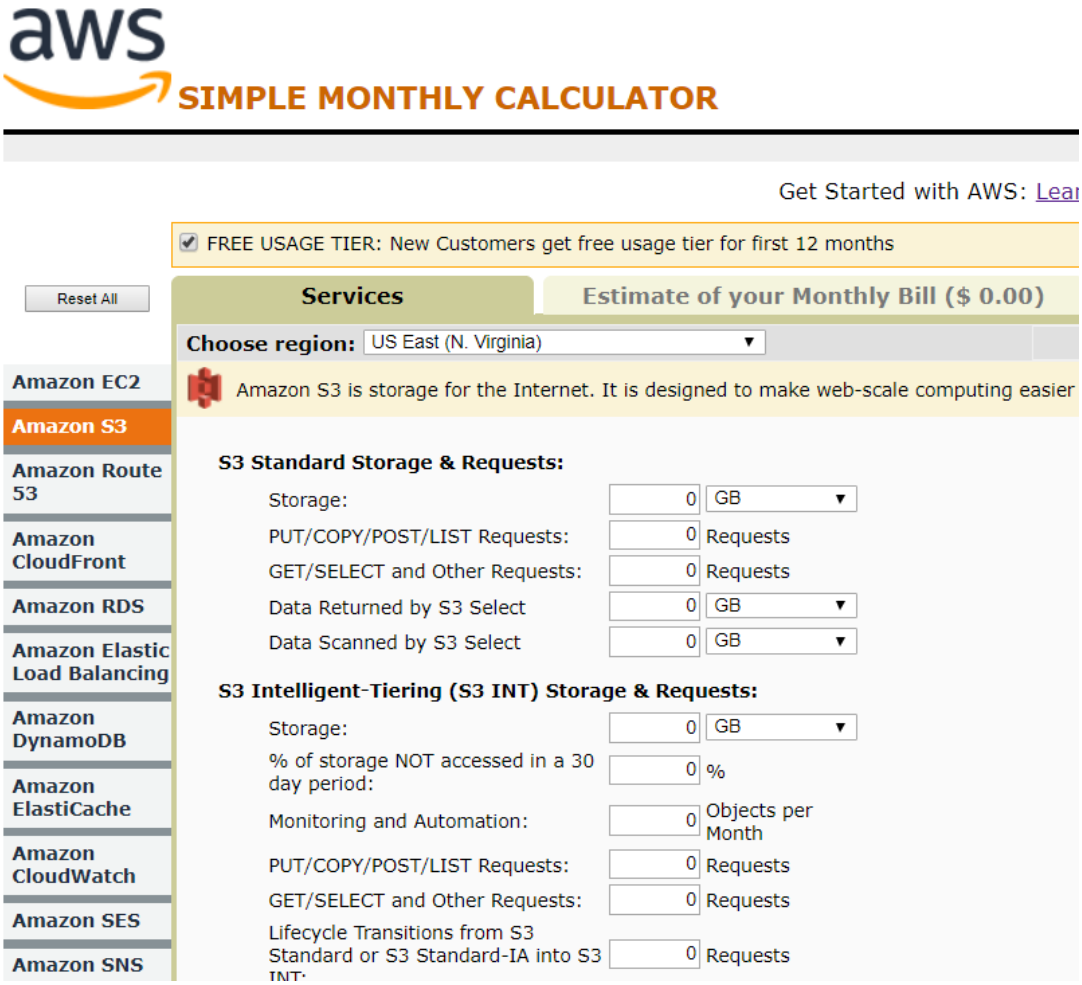
1. Open the Web Browser and type the below URL

   https://calculator.s3.amazonaws.com/index.html

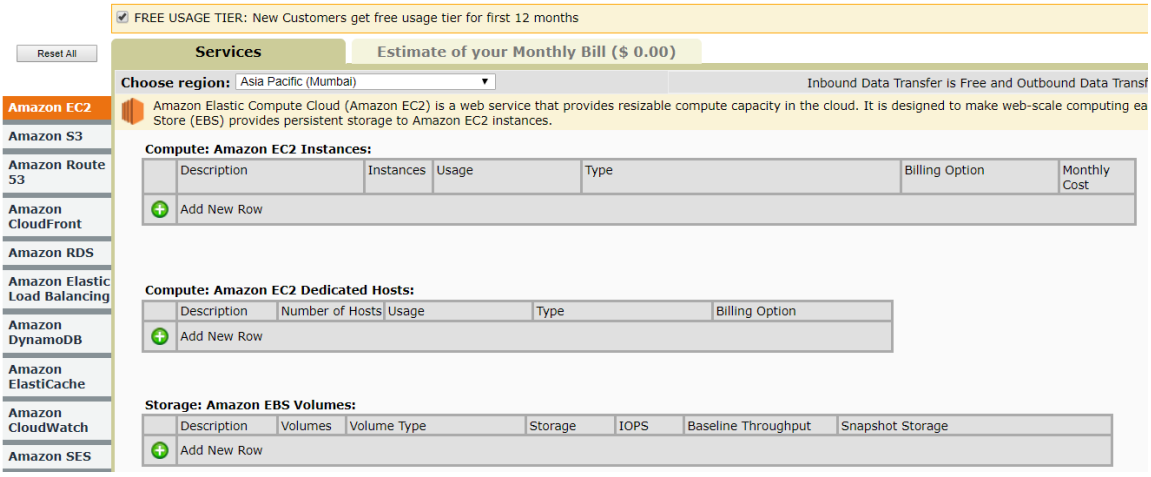
2. The above action opens the below web page



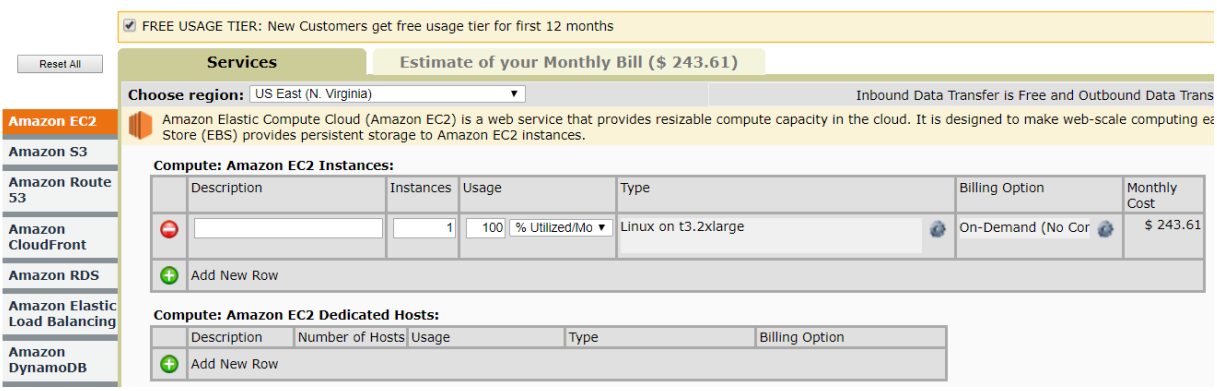
3. **Click** on **Amazon S3** in the left pane. This action brings the below screen.



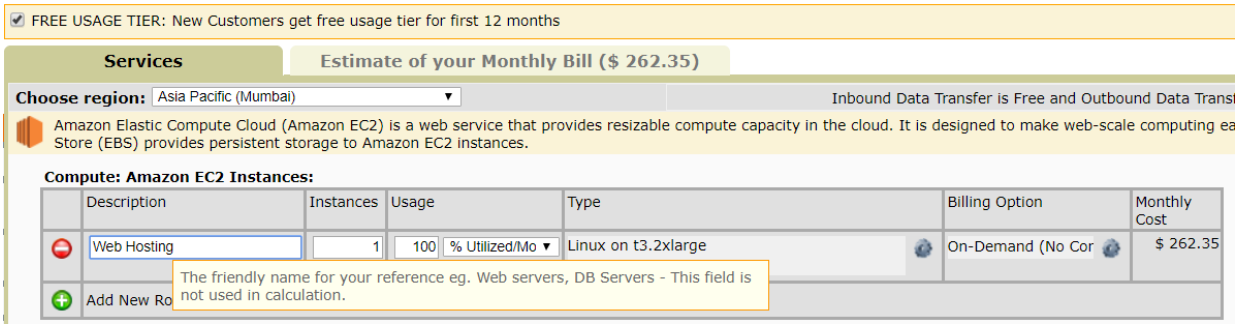
4. **Click** on **Amazon EC2** in the left pane. This action brings the below screen.



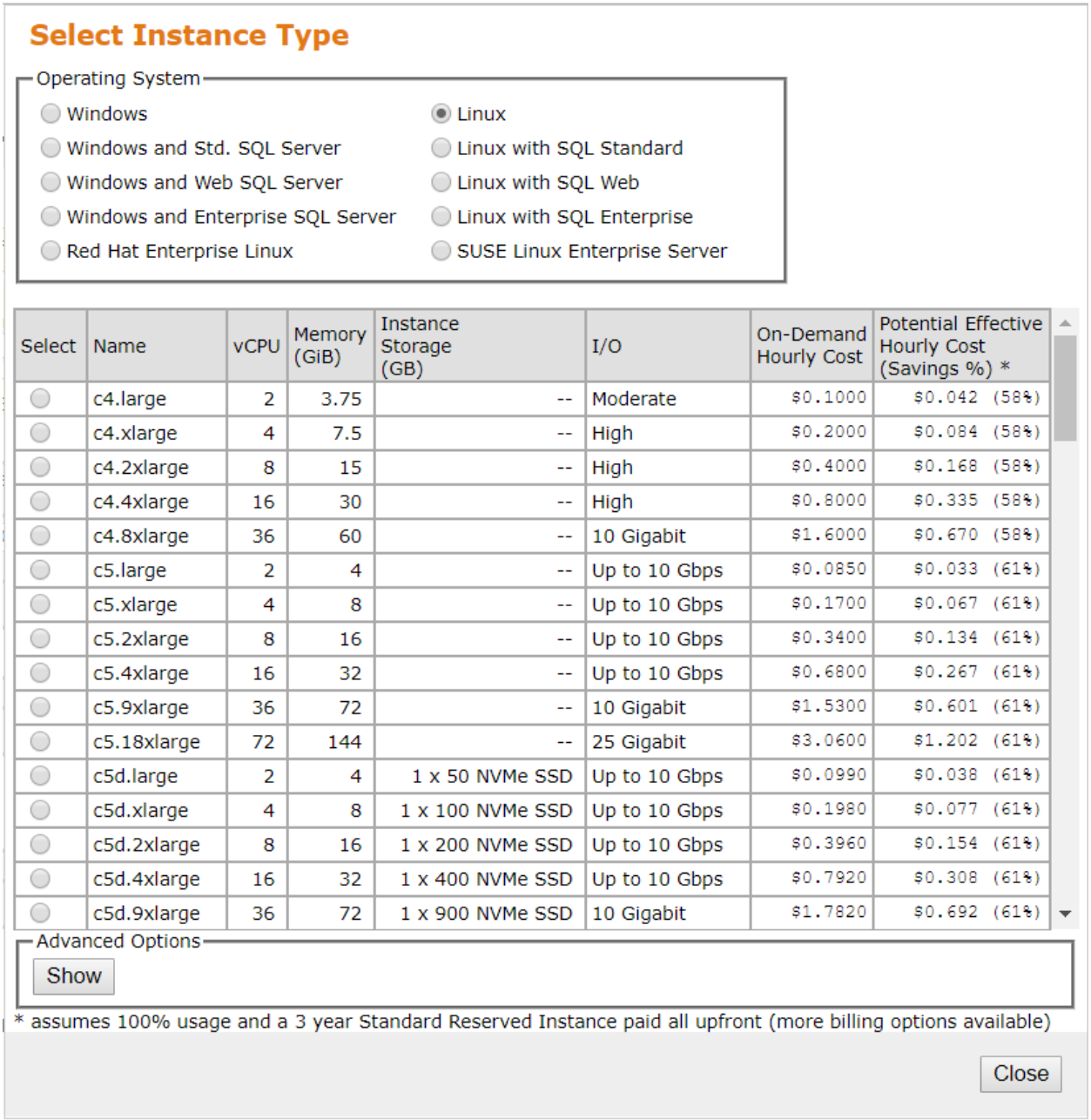
5. **Click** on the **Add New Row in Compute: Amazon EC2 Instances (Green Symbol)**  . This action brings the below screen.



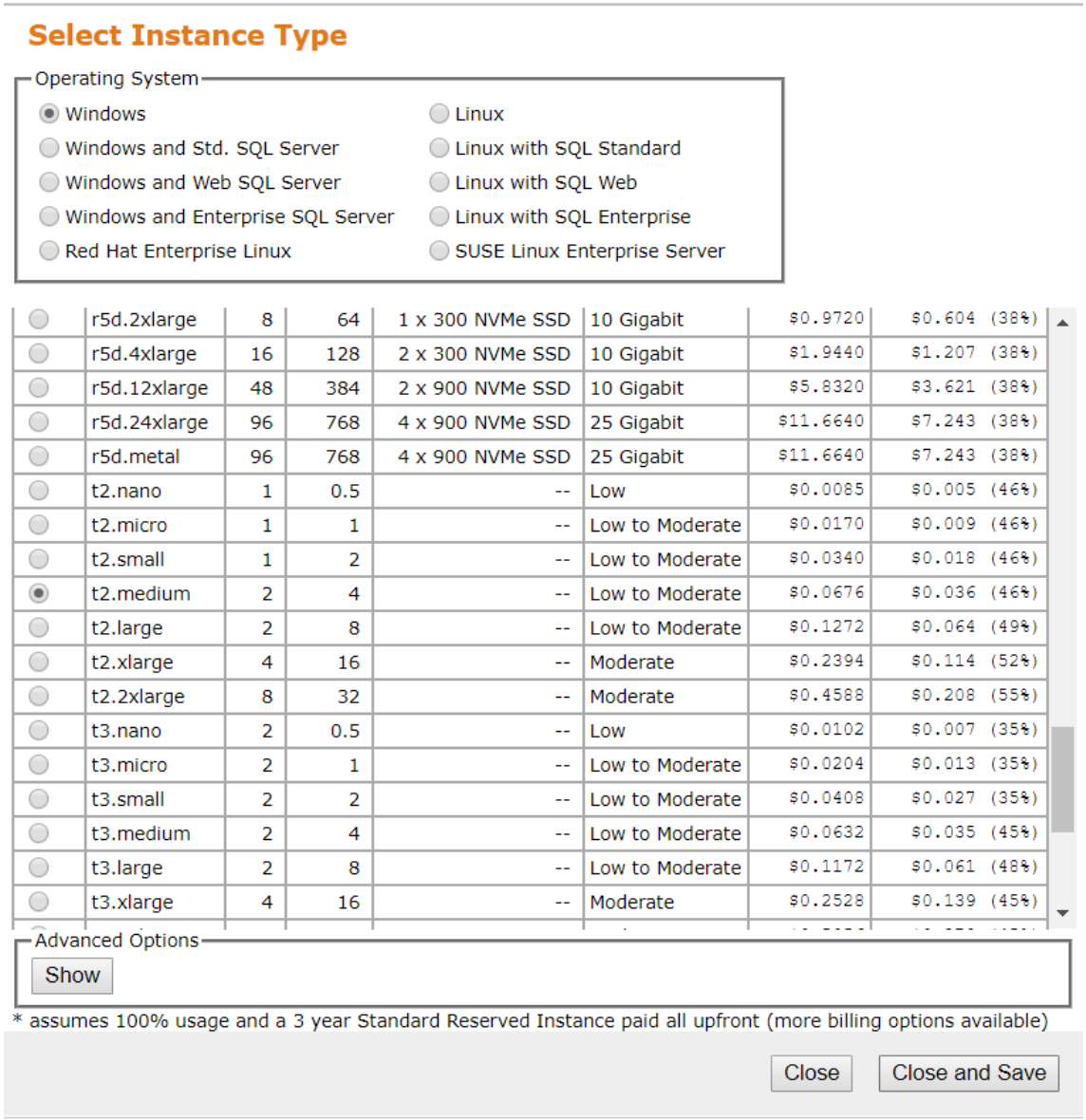
6. In above screen, type information (Only Description, Instances, Usage) like below screen



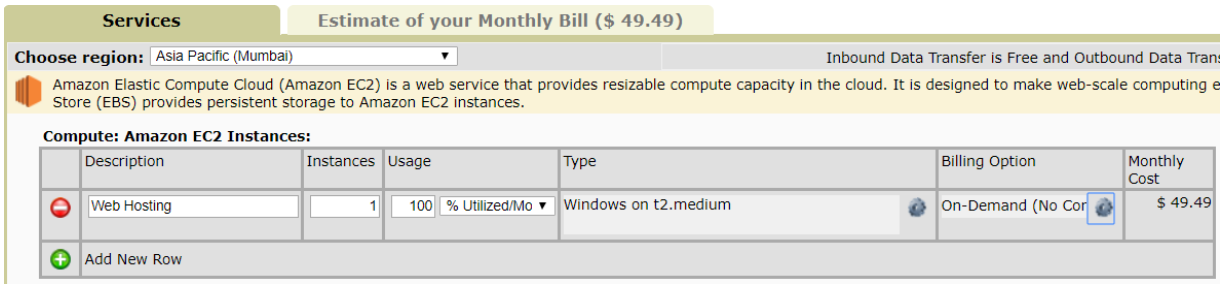
7. In the above screen, **Click** on the **Gear Icon** in the **Type Column**. This action brings the below screen.



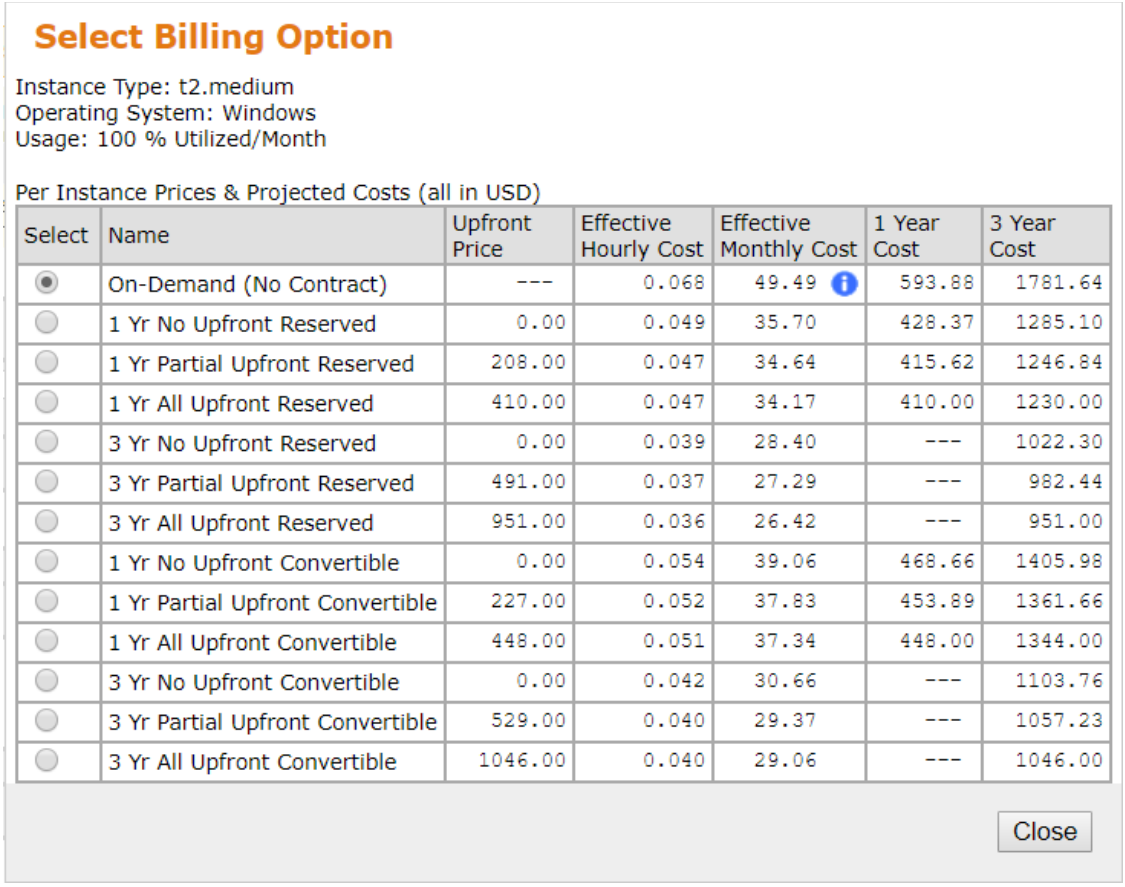
8. In the above screen, **Select Windows** under **Operating System Category**. **Select t2.medium** in **Name** column like below.



9. In the above screen **Click Close and Save**. This action brings the below screen



10. In the above screen, **Click** on the **Gear Icon** in the **Billing Option Column**. This action brings the below screen.



Select Billing Option

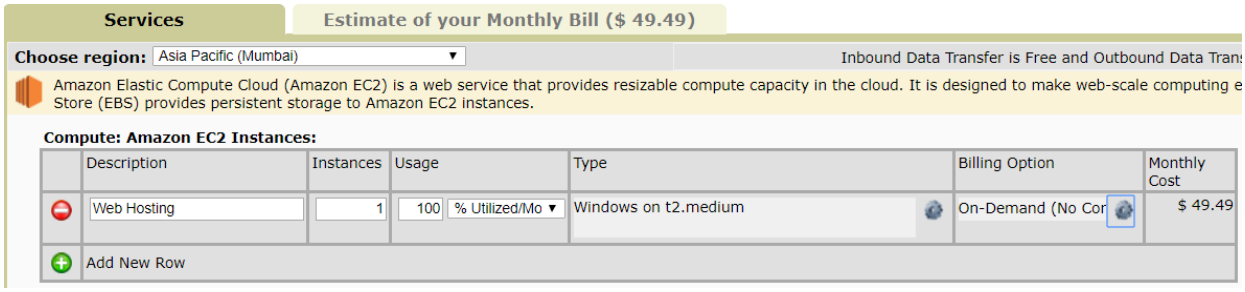
Instance Type: t2.medium
Operating System: Windows
Usage: 100 % Utilized/Month

Per Instance Prices & Projected Costs (all in USD)

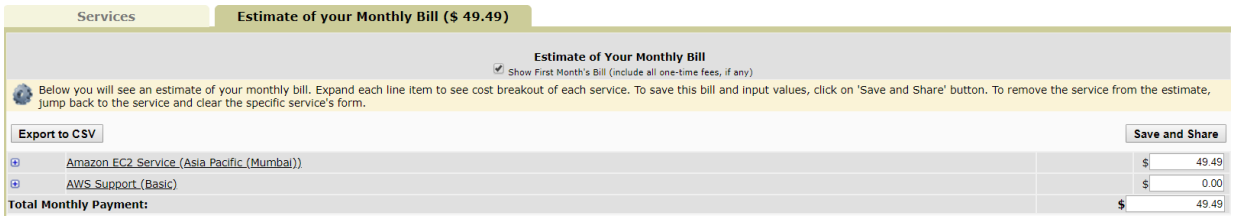
Select	Name	Upfront Price	Effective Hourly Cost	Effective Monthly Cost	1 Year Cost	3 Year Cost
◉	On-Demand (No Contract)	---	0.068	49.49	593.88	1781.64
○	1 Yr No Upfront Reserved	0.00	0.049	35.70	428.37	1285.10
○	1 Yr Partial Upfront Reserved	208.00	0.047	34.64	415.62	1246.84
○	1 Yr All Upfront Reserved	410.00	0.047	34.17	410.00	1230.00
○	3 Yr No Upfront Reserved	0.00	0.039	28.40	---	1022.30
○	3 Yr Partial Upfront Reserved	491.00	0.037	27.29	---	982.44
○	3 Yr All Upfront Reserved	951.00	0.036	26.42	---	951.00
○	1 Yr No Upfront Convertible	0.00	0.054	39.06	468.66	1405.98
○	1 Yr Partial Upfront Convertible	227.00	0.052	37.83	453.89	1361.66
○	1 Yr All Upfront Convertible	448.00	0.051	37.34	448.00	1344.00
○	3 Yr No Upfront Convertible	0.00	0.042	30.66	---	1103.76
○	3 Yr Partial Upfront Convertible	529.00	0.040	29.37	---	1057.23
○	3 Yr All Upfront Convertible	1046.00	0.040	29.06	---	1046.00

Close

11. **Select On-Demand (No Contract)** in the above screen. This **Click** the **Close Button**. This action brings the below screen



12. **Click** on the **Estimate of your Monthly Bill** in the above screen. This action brings the below screen.



13. In the above screen, **Click** on **Export to CSV**. This action generates a CSV file. Open the csv file in Excel and analyze the data.
14. In the above screen, **Click** on **Save and Share**. This action generates a URL. Open the URL and analyze the data.

❖ Lab Program 03 (Exercises)

1. For each region note down the monthly cost. And find which is cheapest region for Amazon EC2 instance.

2. Find out which is the cheapest region for below specification

1.	SUSE Linux Enterprise Server
2.	hs1.8xlarge Instance Type
3.	1 Yr All Upfront Convertible in Billing Option

3. Find out which is the cheapest region for below specification

1.	No of Instances : 4
2.	200 Hours per Month Usage
3.	hs1.8xlarge Instance Type
4.	Windows and Enterprise SQL Server
5.	m5d.4xlarge
6.	Billing Option On Demand

4. Find out which is the cheapest region for below specification

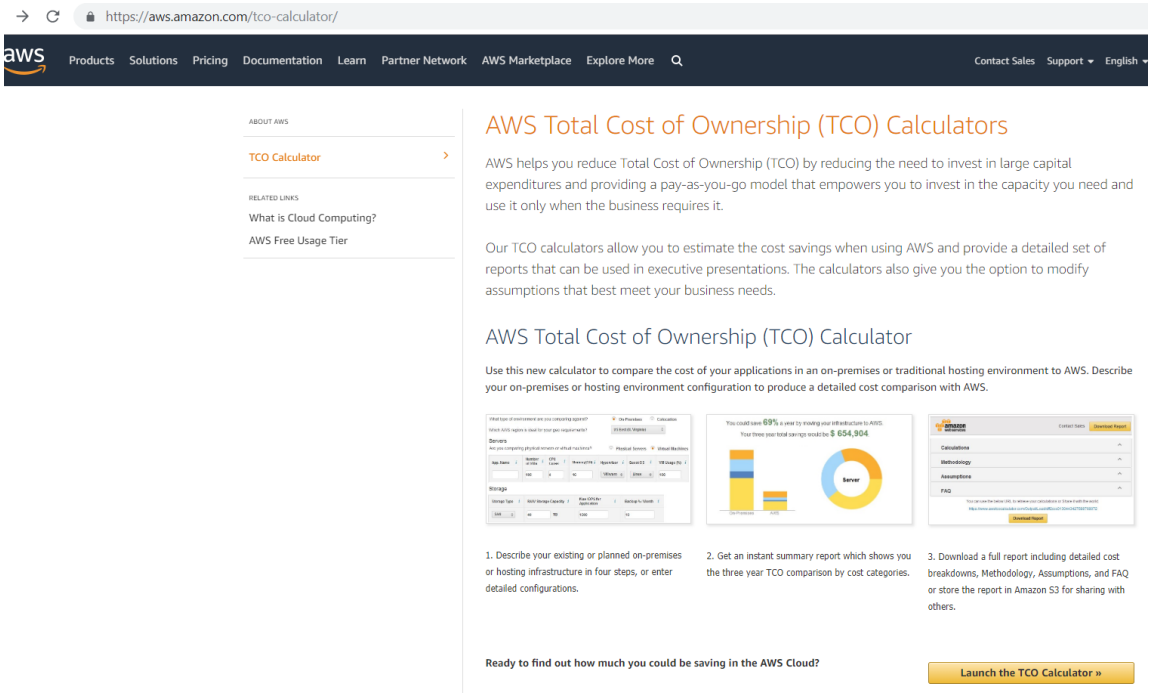
1.	No of Instances : 4
2.	200 Hours per Month Usage
3.	hs1.8xlarge Instance Type
4.	Windows and Enterprise SQL Server
5.	Memory 488 GiB
6.	Need SSD Hard Disk
7.	Billing Option: 3 Yr Partial Upfront Convertible

❖ Lab Program 04

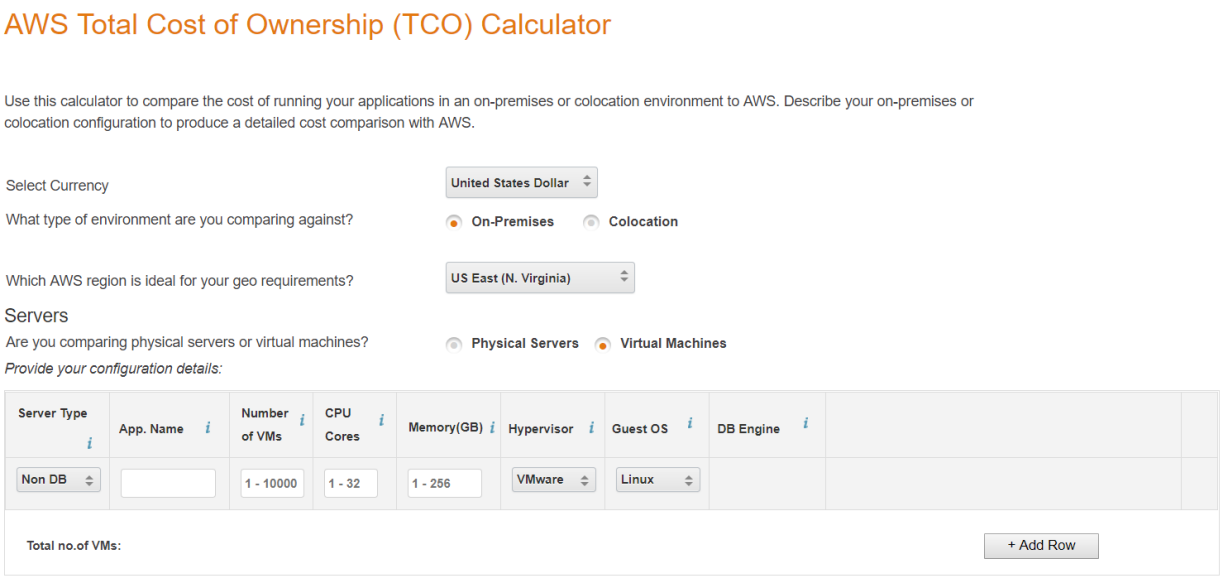
5. Open the Web Browser and type the below URL

   https://aws.amazon.com/tco-calculator/

6. The above action opens the below web page



7. In the above screen, **Click** on the **Launch the TCO Calculator**. This action brings the below screen.



8. In the above screen,

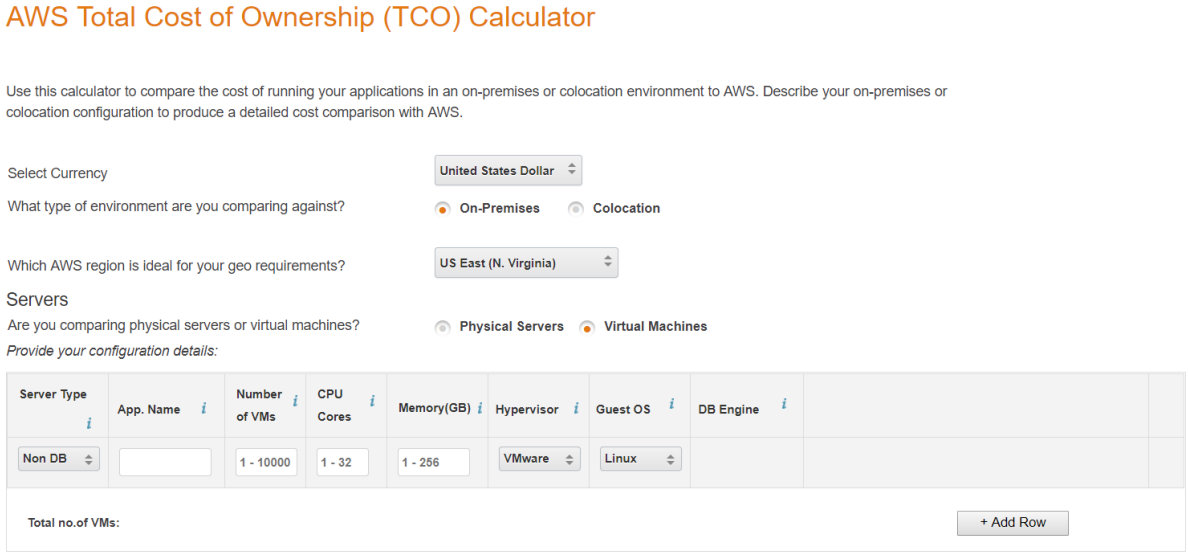
   Select Indian Rupees in **Select Currency** Option**.**

   Select On-Premises in **What type of environment are you comparing against?** Option

   Select US East (N. Virginia) in **Which AWS region is ideal for your geo requirements?** Option

   Select Virtual Machines in **Are you comparing physical servers or virtual machines?** Option

   Like below



9. In the above Screen

   Select Non DB in **Server Type**

   Type Web Site in **App Name**

   Type 1 in **Number of VMs**

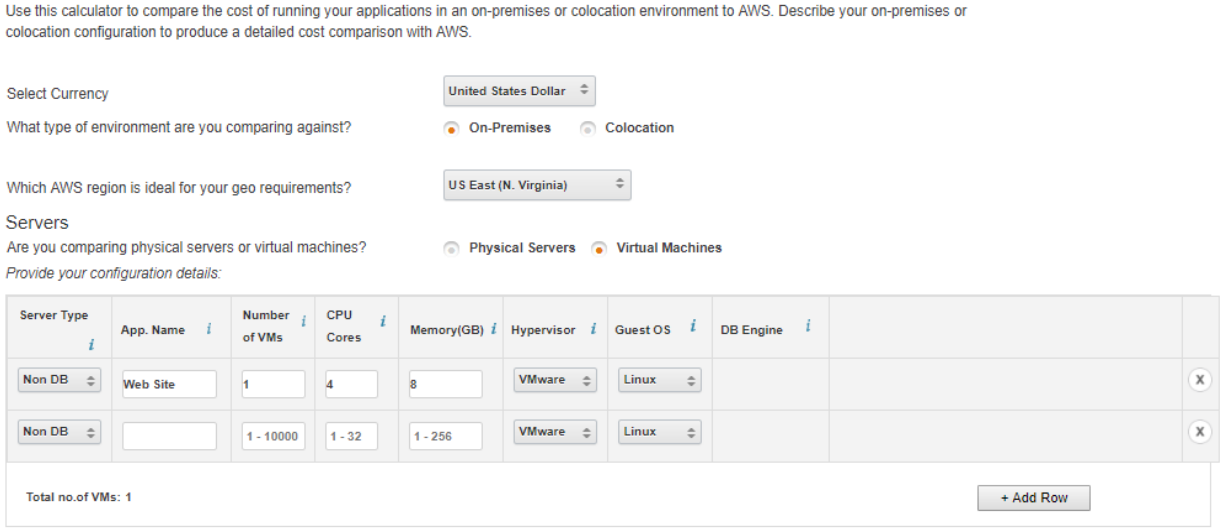
   Type 4 in **CPU Cores**

   Type 8 in **Memory GB**

   Select VMWare in **Hypervisor**

   Select Linux in **Guest OS**

   Then **Click** on **Add Row**. This action brings the below screen



10. In the above screen second row type the below information

    Select DB in **Server Type**

    Type DB Server in **App Name**

    Type 1 in **Number of VMs**

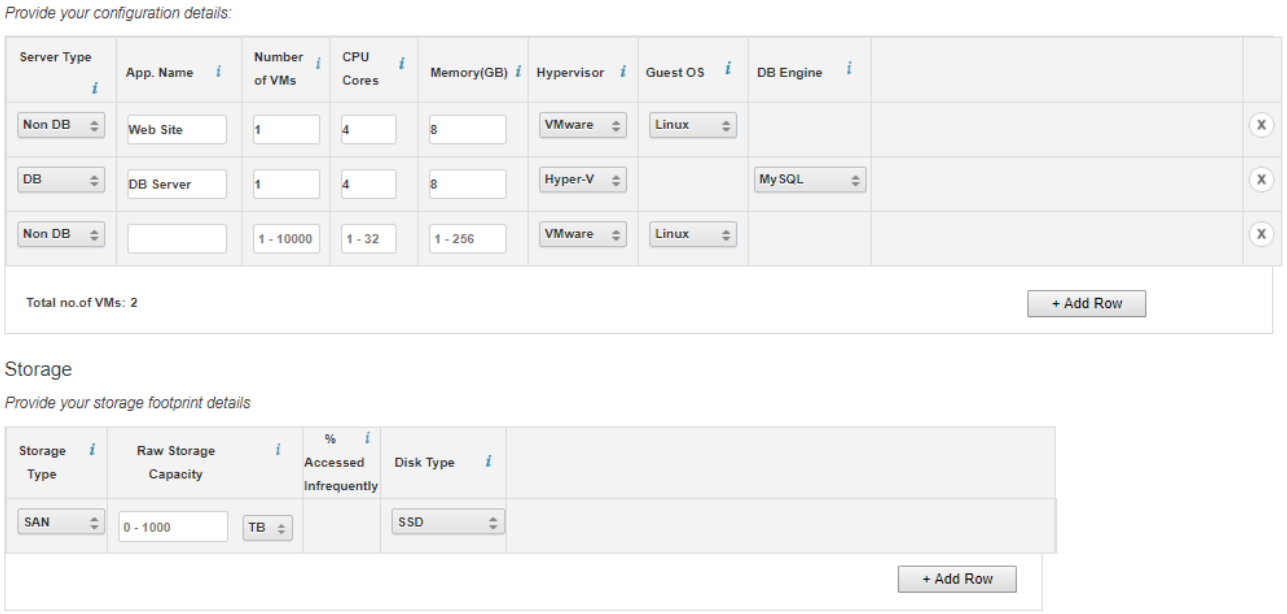
    Type 4 in **CPU Cores**

    Type 8 in **Memory GB**

    Select VMWare in **Hyper-v**

    Select MySql in **DB Engine**

    Then **Click** on **Add Row**. This action brings the below screen



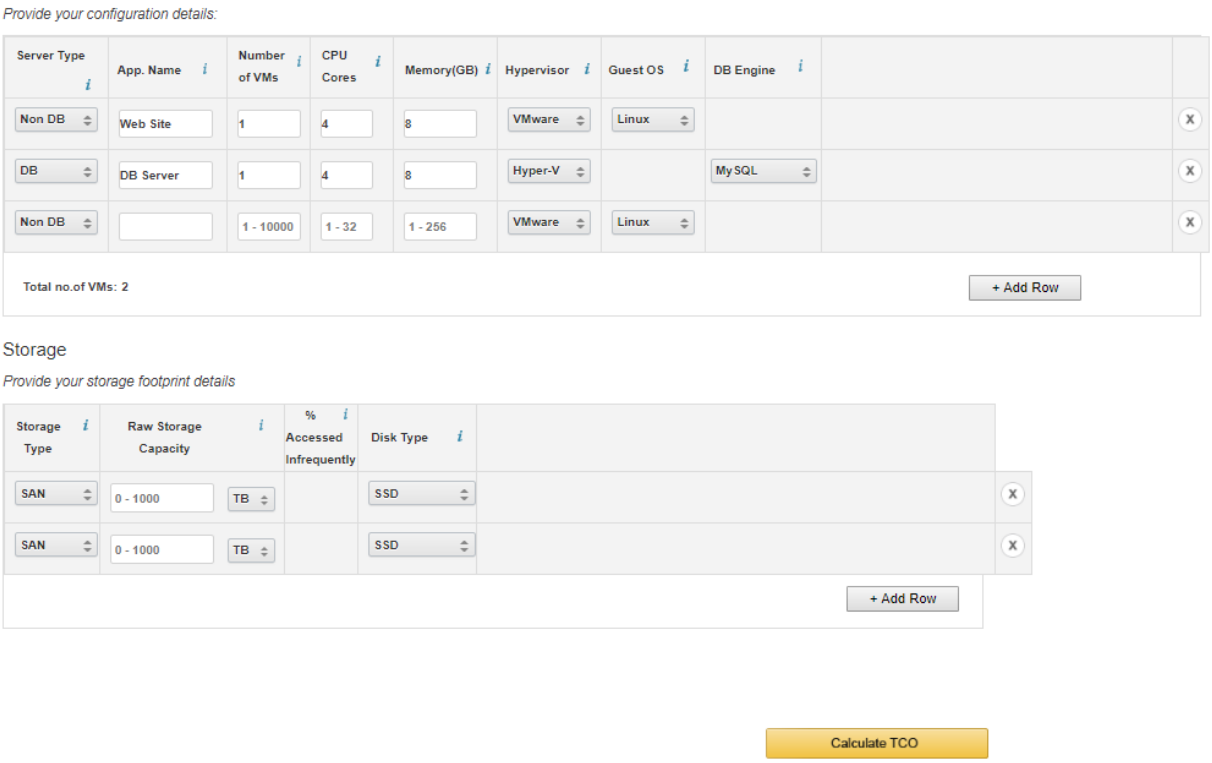
11. In the above screen, Type the below information

    Select SAN in **Storage Type**

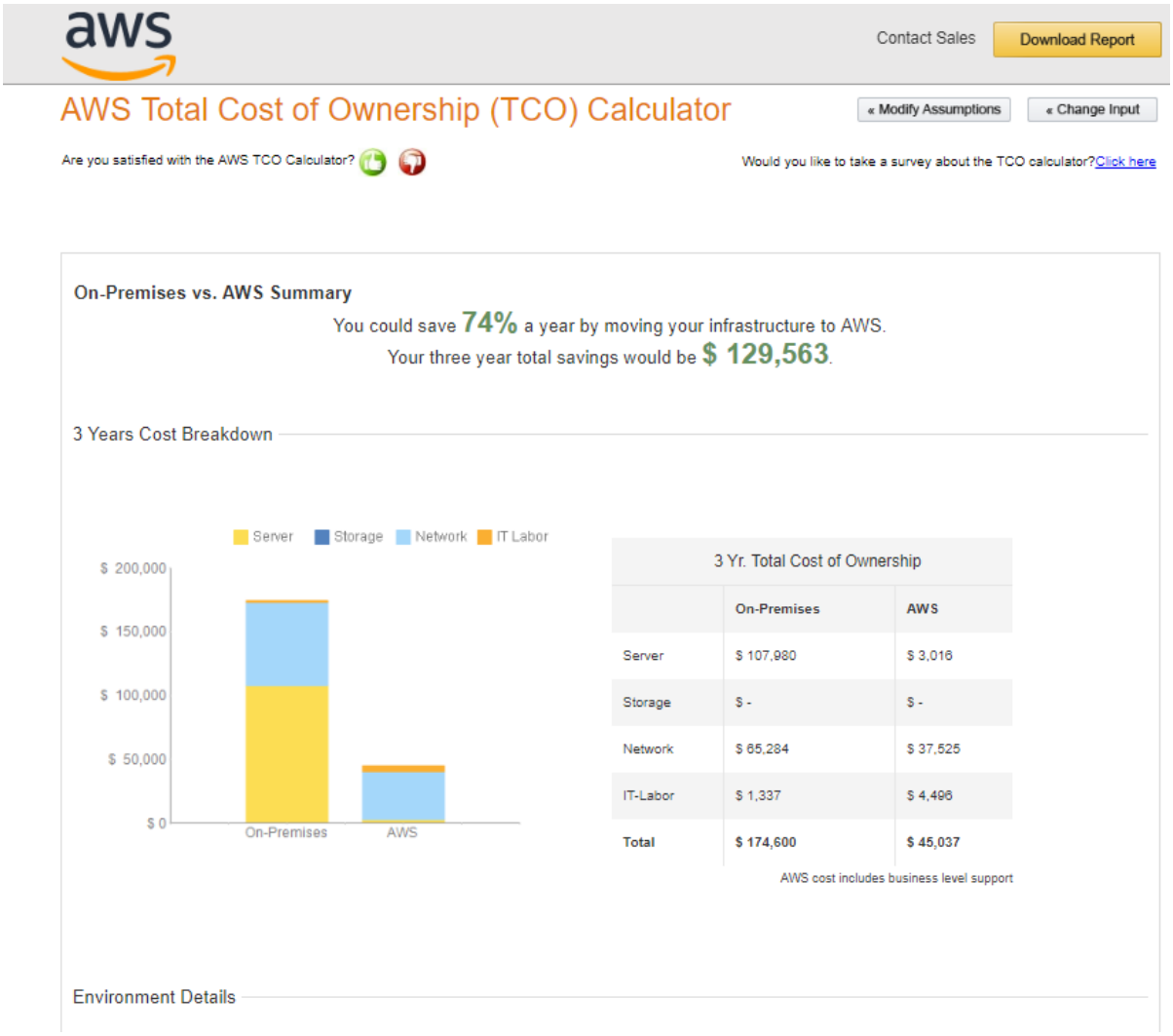
    Type 700 GB in **Raw Storage Capacity**

    Select SSD in **Disk Type**

    Then **Click** on **Add Row**. This action brings the below screen



12. In the above screen, **Click** on **Calculate TCO**. This action brings the below screen.



13. In the above screen, **Click** on **Download** the **Report** and **analysis**.

❖ Lab Program 05 (Exercises)

1. Find out which is the cheapest region for below specification for Singapore Dollar.

1.	Co-location
2.	Physical Server
3.	One Linux Server
4.	No of Virtual Machine 1
5.	No of CPU cores 4
6.	Memory GB 16
7.	Hypervisor is VMWare

2. Find out which is the cheapest region for below specification for Singapore Dollar.

1.	On-Premises
2.	Physical Server
3.	One Linux Server
4.	No of Virtual Machine 1 for Linux Server
5.	No of CPU cores 8 for Linux Server
6.	Memory GB 16 for Linux Server
7.	Hypervisor is VMWare
8.	No of DB Server 1
9.	No of Virtual Machine 1 for DB Server
10.	No of CPU cores 8 for DB Server
11.	Memory GB 16 for DB Server

3. Find out which is the cheapest region for below specification for Singapore Dollar.

1.	On-Premises
2.	Physical Server
3.	SAN Storage Type with 100 GB Capacity of Solid Storage State.

4. Find out which is the cheapest region for below specification for Singapore Dollar.

1.	Sever will be located in our office
2.	Single Tenant Server
3.	Three open source operating system server with one on VMware and one on Hyper-V
4.	1 Virtual Machine for VMWare Operated Server
5.	1 Virtual Machine for Hyper-V Operated Server
6.	16 GB Memory for VMWare Operated Server
7.	8 GB Memory for Hyper-V Operated Server