

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

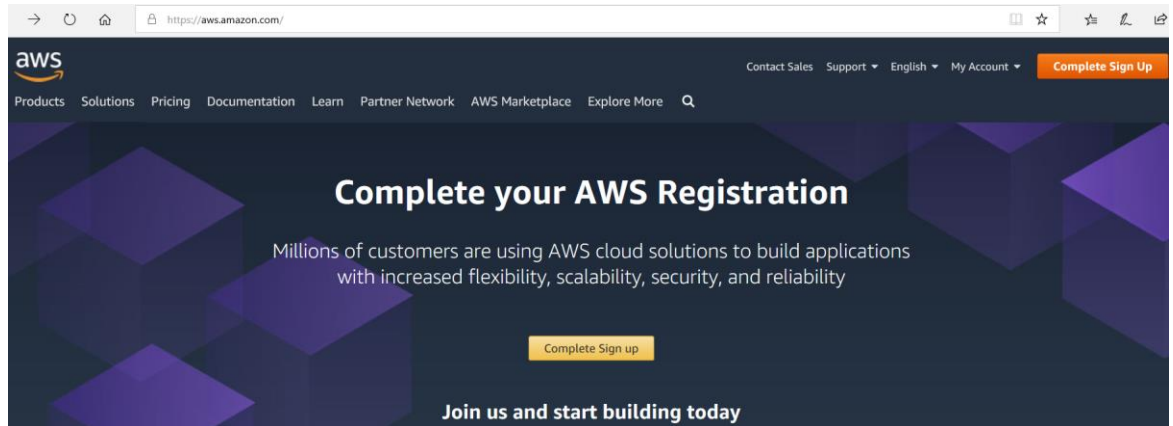
Before working on this lab program, you must know

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

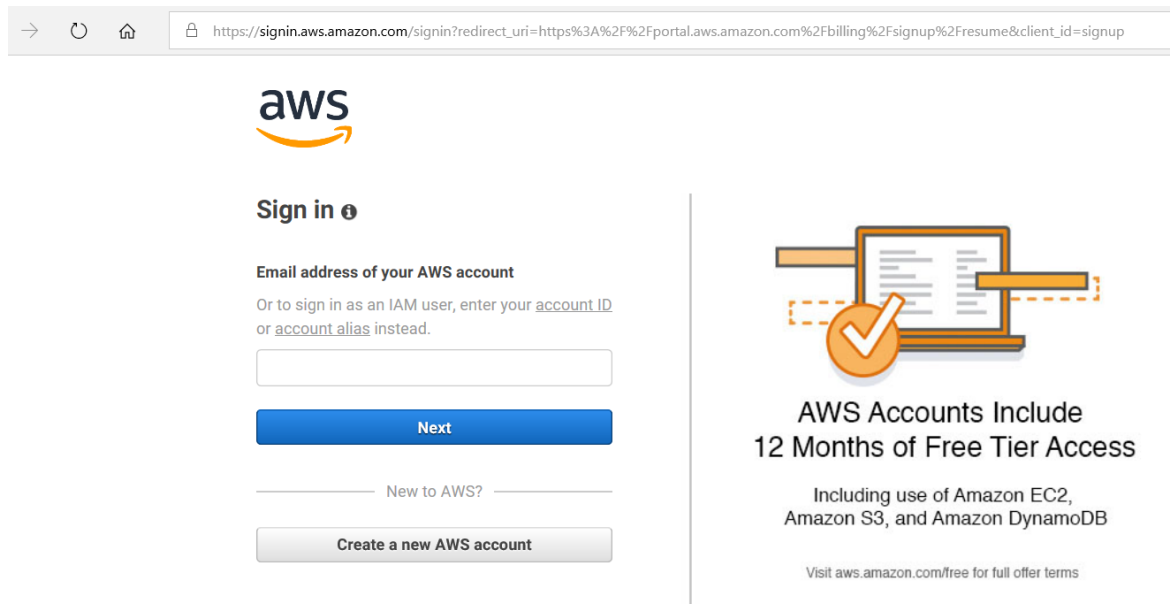
Estimated time to complete this lab programs: 150 minutes

❖ Lab Program 01

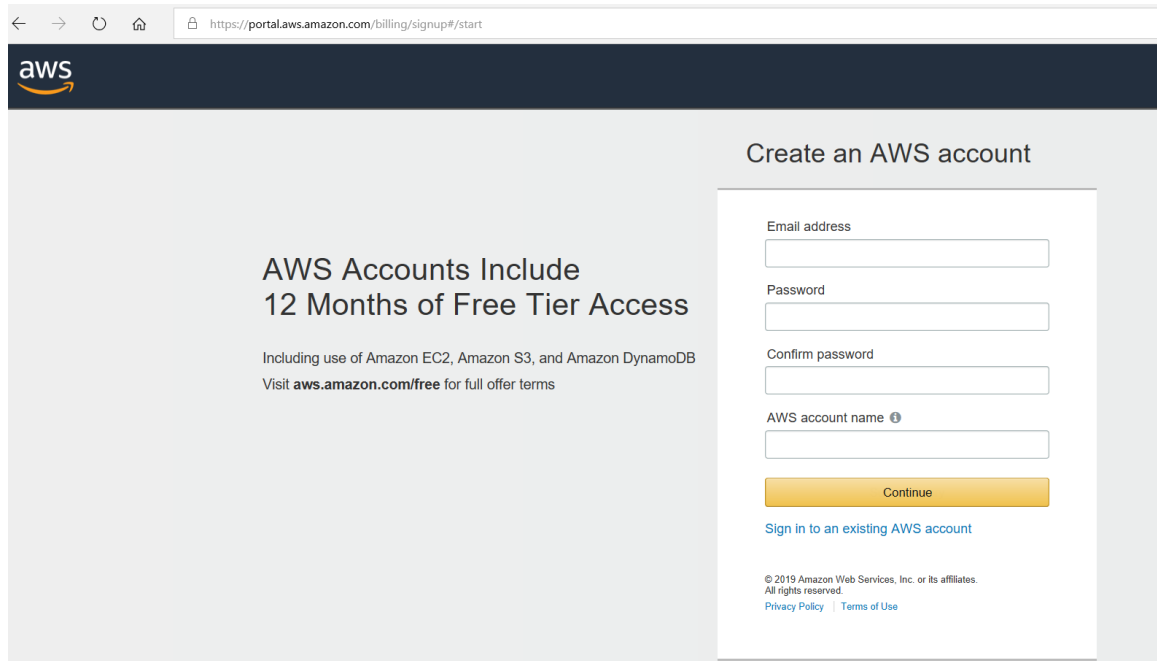
1. Open the Web Browser and type the below URL
<https://aws.amazon.com/>
2. The above action opens the below web page



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



← → ↻ 🏠 https://portal.aws.amazon.com/billing/signup#/start

aws

Create an AWS account

AWS Accounts Include 12 Months of Free Tier Access

Including use of Amazon EC2, Amazon S3, and Amazon DynamoDB
Visit aws.amazon.com/free for full offer terms

Email address

Password

Confirm password

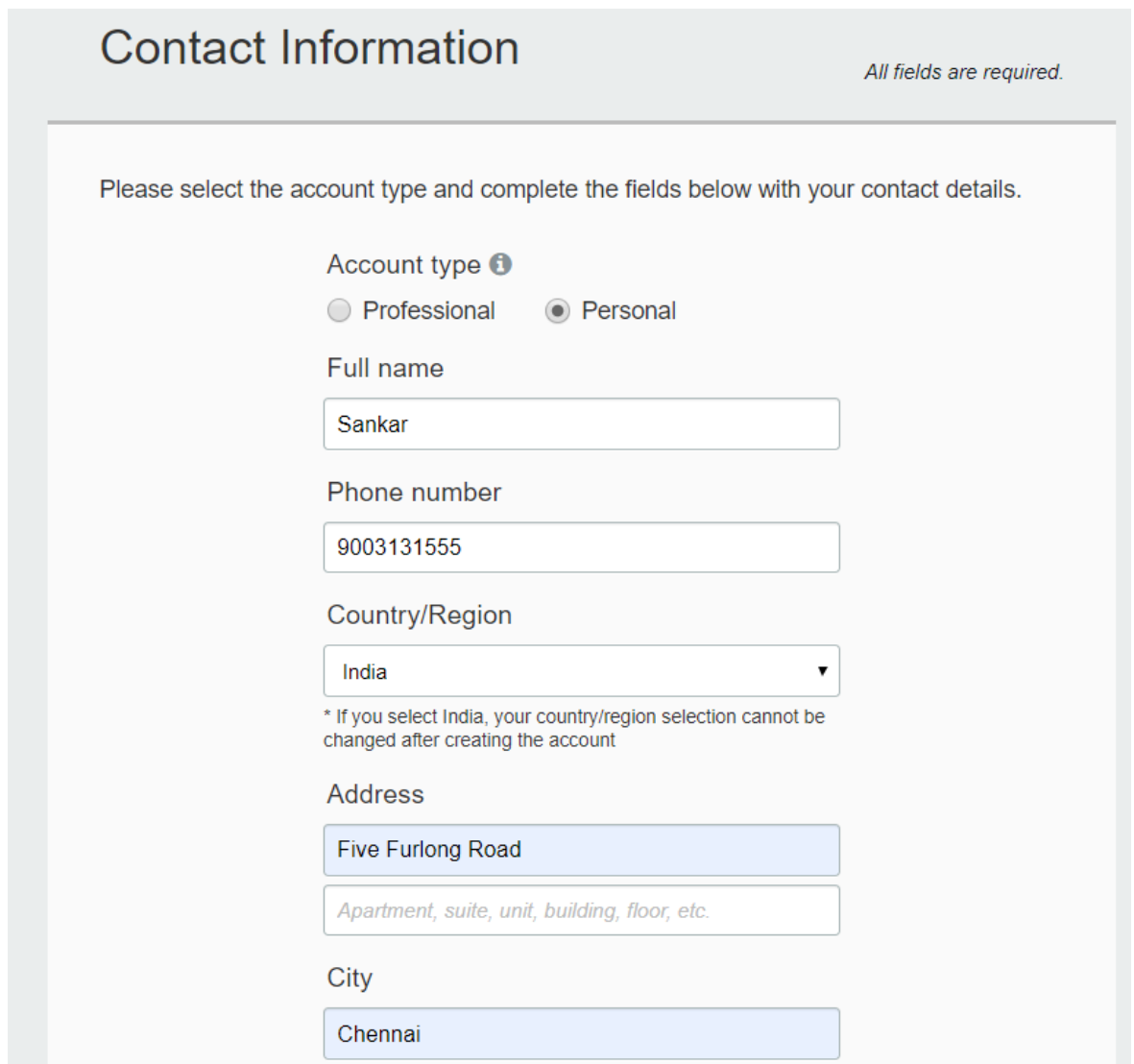
AWS account name ⓘ

Continue

[Sign in to an existing AWS account](#)

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[Privacy Policy](#) | [Terms of Use](#)

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



Contact Information

All fields are required.

Please select the account type and complete the fields below with your contact details.

Account type ⓘ

☐ Professional ☒ Personal

Full name

Phone number

Country/Region

* If you select India, your country/region selection cannot be changed after creating the account

Address

City

City

Chennai

State / Province or region

Postal code

Amazon Internet Services Pvt. Ltd. Customer Agreement

Customers with an India contact address are now required to contract with Amazon Internet Service Private Ltd. (AISPL). AISPL is the local seller for AWS infrastructure services in India.

☒ Check here to indicate that you have read and agree to the terms of the [AISPL Customer Agreement](#)

Create Account and Continue

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[Privacy Policy](#) | [Terms of Use](#) | [Sign Out](#)

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

Payment Information

Please type your payment information so we can verify your identity. We will not charge you unless your usage exceeds the [AWS Free Tier Limits](#). Review [frequently asked questions](#) for more information.

As part of our card verification process we will charge INR 2 on your card when you click the "Secure Submit" button below. This will be refunded once your card has been validated. Your bank may take 3-5 business days to show the refund. Mastercard/Visa customers may be redirected to your bank website to authorize the charge.

Credit/Debit card number

Expiration date

07 2019

Cardholder's name

Billing address

☒ Use my contact address

Five Furlong Road
Chennai 600089
IN

☐ Use a new address

Do you have a PAN? ⓘ

You can go on the Tax Settings Page on Billing and Cost Management Console to update your PAN information.

☐ Yes ☐ No

Secure Submit

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

?redirect=success&x-awsbc-xsrf-token=X1ZwNmNMZmVkRmIQTHBJWUpHMUV6VTJPMWZKeXdPS1BleHVNU

Select a Support Plan

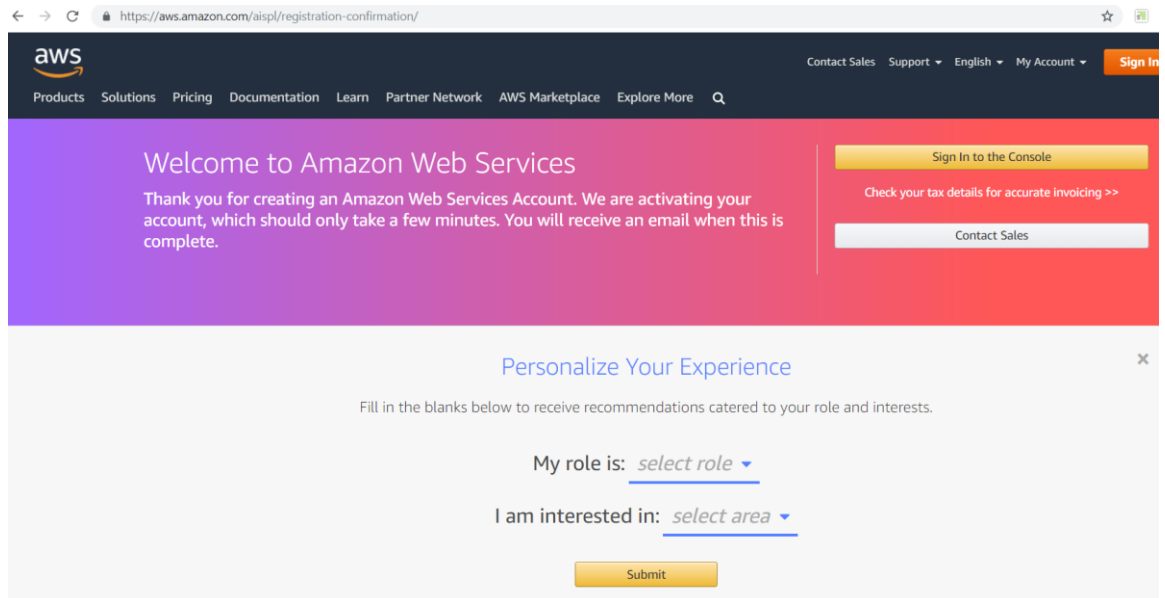
AWS offers a selection of support plans to meet your needs. Choose the support plan that best aligns with your AWS usage. [Learn more](#)

Basic Plan	Developer Plan	Business Plan
Free	From \$29/month	From \$100/month
<ul style="list-style-type: none"> Included with all accounts 24/7 self-service access to forums and resources Best practice checks to help improve security and performance Access to health status and notifications 	<ul style="list-style-type: none"> For early adoption, testing and development Email access to AWS Support during business hours 1 primary contact can open an unlimited number of support cases 12-hour response time for nonproduction systems 	<ul style="list-style-type: none"> For production workloads & business-critical dependencies 24/7 chat, phone, and email access to AWS Support Unlimited contacts can open an unlimited number of support cases 1-hour response time for production systems

Need Enterprise level support?

Contact your account manager for additional information on running business and mission critical-workloads on AWS (starting at \$15,000/month). [Learn more](#)

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



← → ↻ https://aws.amazon.com/aispl/registration-confirmation/ ☆

aws Contact Sales Support English My Account Sign in

Products Solutions Pricing Documentation Learn Partner Network AWS Marketplace Explore More Q

Welcome to Amazon Web Services

Thank you for creating an Amazon Web Services Account. We are activating your account, which should only take a few minutes. You will receive an email when this is complete.

Sign In to the Console

Check your tax details for accurate invoicing >>

Contact Sales

Personalize Your Experience

Fill in the blanks below to receive recommendations catered to your role and interests.

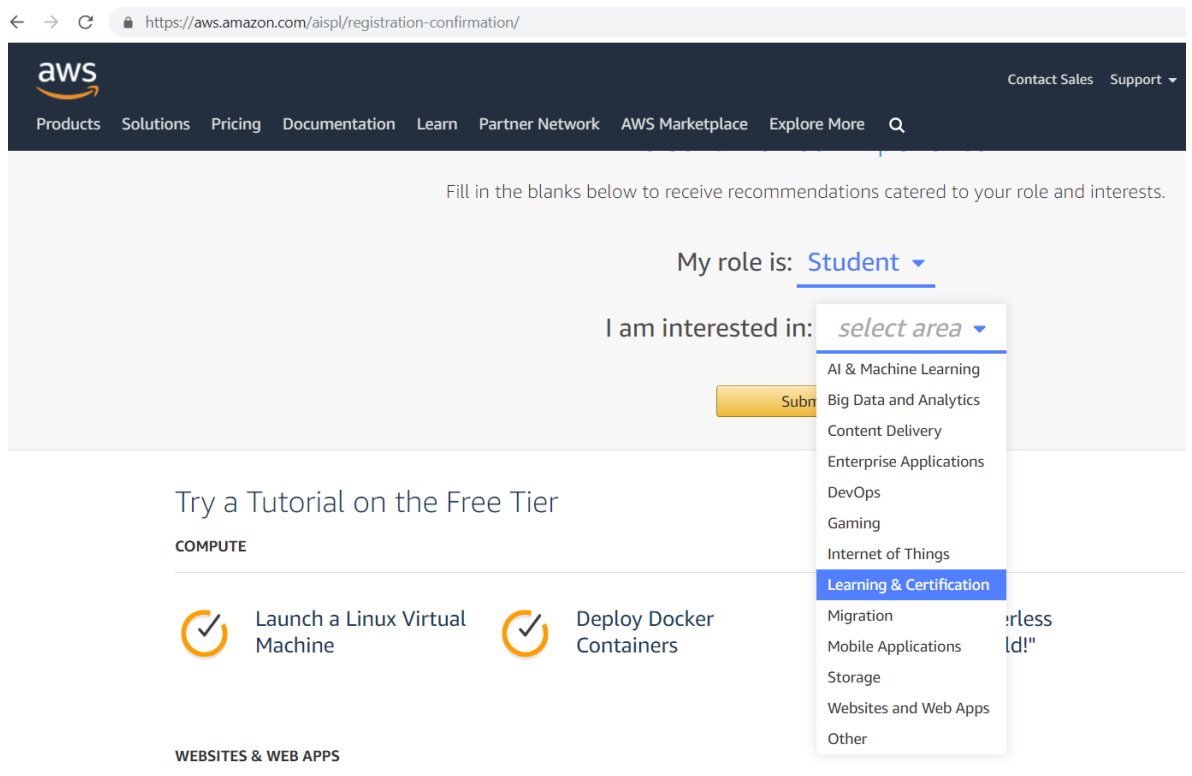
My role is: select role ▼

I am interested in: select area ▼

Submit

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



← → ↻ https://aws.amazon.com/aispl/registration-confirmation/ Contact Sales Support

aws Products Solutions Pricing Documentation Learn Partner Network AWS Marketplace Explore More Q

Fill in the blanks below to receive recommendations catered to your role and interests.

My role is: Student ▼

I am interested in: select area ▼

- AI & Machine Learning
- Big Data and Analytics
- Content Delivery
- Enterprise Applications
- DevOps
- Gaming
- Internet of Things
- Learning & Certification**
- Migration
- Mobile Applications
- Storage
- Websites and Web Apps
- Other

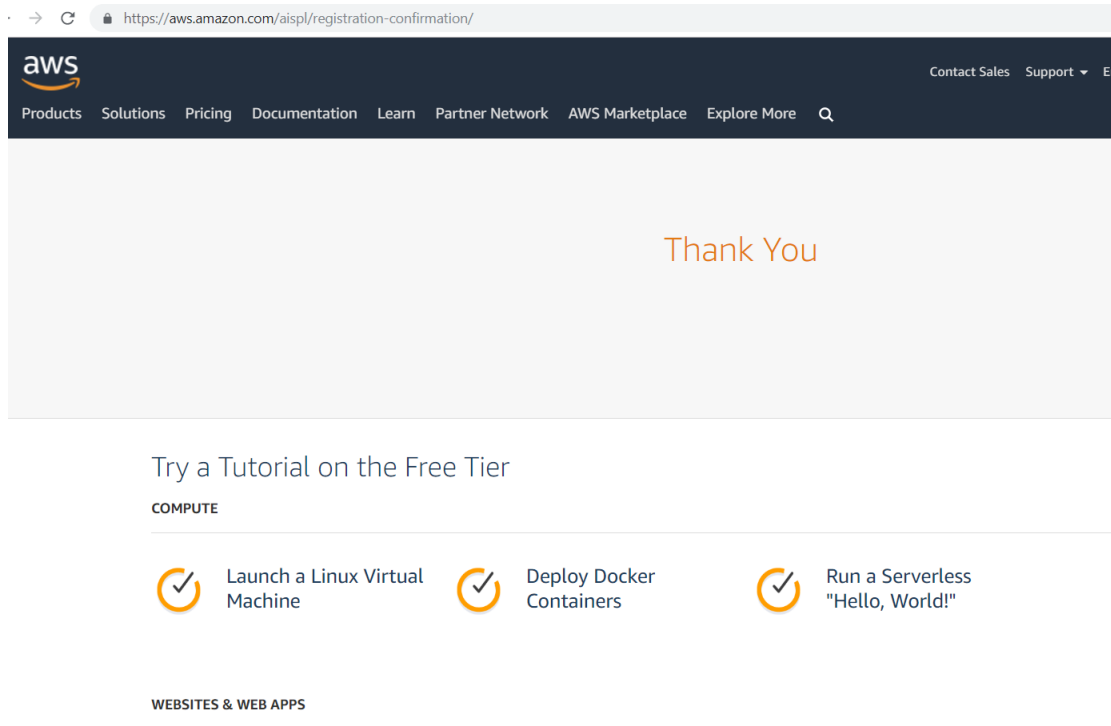
Submit

Try a Tutorial on the Free Tier

COMPUTE

- ✓ Launch a Linux Virtual Machine
- ✓ Deploy Docker Containers

WEBSITES & WEB APPS



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

← → ↻ <https://calculator.s3.amazonaws.com/index.html>

aws SIMPLE MONTHLY CALCULATOR [Need Help? Wa](#)

Get Started with AWS: [Learn more about our Free Tier](#) or [Sign Up for an AWS Account »](#)

☒ FREE USAGE TIER: New Customers get free usage tier for first 12 months

Services Estimate of your Monthly Bill (\$ 0.00)

Choose region: US East (N. Virginia) Inbound Data Transfer is Free and Outbound Data Transfer is

Amazon EC2 Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides resizable compute capacity in the cloud. It is designed to make web-scale computing easier f
Store (EBS) provides persistent storage to Amazon EC2 instances.

Reset All

Amazon S3

Amazon Route 53

Amazon CloudFront

Amazon RDS

Amazon Elastic Load Balancing

Amazon DynamoDB

Amazon ElastiCache

Amazon CloudWatch

Amazon SES

Amazon SNS

Amazon Elastic Transcoder

Amazon WorkSpaces

Amazon WorkDocs

Compute: Amazon EC2 Instances:

Description	Instances	Usage	Type	Billing Option	Monthly Cost
+ Add New Row					

Compute: Amazon EC2 Dedicated Hosts:

Description	Number of Hosts	Usage	Type	Billing Option
+ Add New Row				

Storage: Amazon EBS Volumes:

Description	Volumes	Volume Type	Storage	IOPS	Baseline Throughput	Snapshot Storage
+ Add New Row						

Compute: Amazon Elastic Graphics:

Description	Number of Elastic Graphics	Usage	Elastic Graphics Size and Memory
+ Add New Row			

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

aws

SIMPLE MONTHLY CALCULATOR

Get Started with AWS: [Learn More](#)

☒ FREE USAGE TIER: New Customers get free usage tier for first 12 months

Reset All

Services | Estimate of your Monthly Bill (\$ 0.00)

Choose region: US East (N. Virginia)

Amazon S3 is storage for the Internet. It is designed to make web-scale computing easier

S3 Standard Storage & Requests:

Storage: 0 GB

PUT/COPY/POST/LIST Requests: 0 Requests

GET/SELECT and Other Requests: 0 Requests

Data Returned by S3 Select: 0 GB

Data Scanned by S3 Select: 0 GB

S3 Intelligent-Tiering (S3 INT) Storage & Requests:

Storage: 0 GB

% of storage NOT accessed in a 30 day period: 0 %

Monitoring and Automation: 0 Objects per Month

PUT/COPY/POST/LIST Requests: 0 Requests

GET/SELECT and Other Requests: 0 Requests

Lifecycle Transitions from S3 Standard or S3 Standard-IA into S3 INT: 0 Requests

Amazon EC2

Amazon S3

Amazon Route 53

Amazon CloudFront

Amazon RDS

Amazon Elastic Load Balancing

Amazon DynamoDB

Amazon ElastiCache

Amazon CloudWatch

Amazon SES

Amazon SNS

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

☒ FREE USAGE TIER: New Customers get free usage tier for first 12 months

Reset All

Services | Estimate of your Monthly Bill (\$ 0.00)

Choose region: Asia Pacific (Mumbai)

Amazon EC2 Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides resizable compute capacity in the cloud. It is designed to make web-scale computing easier.

Compute: Amazon EC2 Instances:

Description	Instances	Usage	Type	Billing Option	Monthly Cost
+ Add New Row					

Compute: Amazon EC2 Dedicated Hosts:

Description	Number of Hosts	Usage	Type	Billing Option
+ Add New Row				

Storage: Amazon EBS Volumes:

Description	Volumes	Volume Type	Storage	IOPS	Baseline Throughput	Snapshot Storage
+ Add New Row						

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

☒ FREE USAGE TIER: New Customers get free usage tier for first 12 months

Reset All

Services | Estimate of your Monthly Bill (\$ 243.61)

Choose region: US East (N. Virginia)

Amazon EC2 Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides resizable compute capacity in the cloud. It is designed to make web-scale computing easier.

Compute: Amazon EC2 Instances:

Description	Instances	Usage	Type	Billing Option	Monthly Cost
- []	1	100 % Utilized/Mo	Linux on t3.2xlarge	On-Demand (No Cor)	\$ 243.61
+ Add New Row					

Compute: Amazon EC2 Dedicated Hosts:

Description	Number of Hosts	Usage	Type	Billing Option
+ Add New Row				

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

☒ FREE USAGE TIER: New Customers get free usage tier for first 12 months

Services **Estimate of your Monthly Bill (\$ 262.35)**

Choose region: Asia Pacific (Mumbai) Inbound Data Transfer is Free and Outbound Data Transfer is \$0.09/GB

Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides resizable compute capacity in the cloud. It is designed to make web-scale computing easier for developers. Amazon Elastic Block Store (EBS) provides persistent storage to Amazon EC2 instances.

Compute: Amazon EC2 Instances:

Description	Instances	Usage	Type	Billing Option	Monthly Cost
Web Hosting	1	100 % Utilized/Mo	Linux on t3.xlarge	On-Demand (No Commitment)	\$ 262.35
Add New Row <small>The friendly name for your reference eg. Web servers, DB Servers - This field is not used in calculation.</small>					

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

Select Instance Type

Operating System

- ☐ Windows
- ☒ Linux
- ☐ Windows and Std. SQL Server
- ☐ Linux with SQL Standard
- ☐ Windows and Web SQL Server
- ☐ Linux with SQL Web
- ☐ Windows and Enterprise SQL Server
- ☐ Linux with SQL Enterprise
- ☐ Red Hat Enterprise Linux
- ☐ SUSE Linux Enterprise Server

Select	Name	vCPU	Memory (GiB)	Instance Storage (GB)	I/O	On-Demand Hourly Cost	Potential Effective Hourly Cost (Savings %) *
<input type="radio"/>	c4.large	2	3.75		Moderate	\$0.1000	\$0.042 (58%)
<input type="radio"/>	c4.xlarge	4	7.5		High	\$0.2000	\$0.084 (58%)
<input type="radio"/>	c4.2xlarge	8	15		High	\$0.4000	\$0.168 (58%)
<input type="radio"/>	c4.4xlarge	16	30		High	\$0.8000	\$0.335 (58%)
<input type="radio"/>	c4.8xlarge	36	60		10 Gigabit	\$1.6000	\$0.670 (58%)
<input type="radio"/>	c5.large	2	4		Up to 10 Gbps	\$0.0850	\$0.033 (61%)
<input type="radio"/>	c5.xlarge	4	8		Up to 10 Gbps	\$0.1700	\$0.067 (61%)
<input type="radio"/>	c5.2xlarge	8	16		Up to 10 Gbps	\$0.3400	\$0.134 (61%)
<input type="radio"/>	c5.4xlarge	16	32		Up to 10 Gbps	\$0.6800	\$0.267 (61%)
<input type="radio"/>	c5.9xlarge	36	72		10 Gigabit	\$1.5300	\$0.601 (61%)
<input type="radio"/>	c5.18xlarge	72	144		25 Gigabit	\$3.0600	\$1.202 (61%)
<input type="radio"/>	c5d.large	2	4	1 x 50 NVMe SSD	Up to 10 Gbps	\$0.0990	\$0.038 (61%)
<input type="radio"/>	c5d.xlarge	4	8	1 x 100 NVMe SSD	Up to 10 Gbps	\$0.1980	\$0.077 (61%)
<input type="radio"/>	c5d.2xlarge	8	16	1 x 200 NVMe SSD	Up to 10 Gbps	\$0.3960	\$0.154 (61%)
<input type="radio"/>	c5d.4xlarge	16	32	1 x 400 NVMe SSD	Up to 10 Gbps	\$0.7920	\$0.308 (61%)
<input type="radio"/>	c5d.9xlarge	36	72	1 x 900 NVMe SSD	10 Gigabit	\$1.7820	\$0.692 (61%)

Advanced Options

Show

* assumes 100% usage and a 3 year Standard Reserved Instance paid all upfront (more billing options available)

Close

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

Select Instance Type

Operating System

- ☒ Windows
- ☐ Windows and Std. SQL Server
- ☐ Windows and Web SQL Server
- ☐ Windows and Enterprise SQL Server
- ☐ Red Hat Enterprise Linux
- ☐ Linux
- ☐ Linux with SQL Standard
- ☐ Linux with SQL Web
- ☐ Linux with SQL Enterprise
- ☐ SUSE Linux Enterprise Server

<input type="radio"/>	r5d.2xlarge	8	64	1 x 300 NVMe SSD	10 Gigabit	\$0.9720	\$0.604 (38%)
<input type="radio"/>	r5d.4xlarge	16	128	2 x 300 NVMe SSD	10 Gigabit	\$1.9440	\$1.207 (38%)
<input type="radio"/>	r5d.12xlarge	48	384	2 x 900 NVMe SSD	10 Gigabit	\$5.8320	\$3.621 (38%)
<input type="radio"/>	r5d.24xlarge	96	768	4 x 900 NVMe SSD	25 Gigabit	\$11.6640	\$7.243 (38%)
<input type="radio"/>	r5d.metal	96	768	4 x 900 NVMe SSD	25 Gigabit	\$11.6640	\$7.243 (38%)
<input type="radio"/>	t2.nano	1	0.5	--	Low	\$0.0085	\$0.005 (46%)
<input type="radio"/>	t2.micro	1	1	--	Low to Moderate	\$0.0170	\$0.009 (46%)
<input type="radio"/>	t2.small	1	2	--	Low to Moderate	\$0.0340	\$0.018 (46%)
<input checked="" type="radio"/>	t2.medium	2	4	--	Low to Moderate	\$0.0676	\$0.036 (46%)
<input type="radio"/>	t2.large	2	8	--	Low to Moderate	\$0.1272	\$0.064 (49%)
<input type="radio"/>	t2.xlarge	4	16	--	Moderate	\$0.2394	\$0.114 (52%)
<input type="radio"/>	t2.2xlarge	8	32	--	Moderate	\$0.4588	\$0.208 (55%)
<input type="radio"/>	t3.nano	2	0.5	--	Low	\$0.0102	\$0.007 (35%)
<input type="radio"/>	t3.micro	2	1	--	Low to Moderate	\$0.0204	\$0.013 (35%)
<input type="radio"/>	t3.small	2	2	--	Low to Moderate	\$0.0408	\$0.027 (35%)
<input type="radio"/>	t3.medium	2	4	--	Low to Moderate	\$0.0632	\$0.035 (45%)
<input type="radio"/>	t3.large	2	8	--	Low to Moderate	\$0.1172	\$0.061 (48%)
<input type="radio"/>	t3.xlarge	4	16	--	Moderate	\$0.2528	\$0.139 (45%)

Advanced Options

* assumes 100% usage and a 3 year Standard Reserved Instance paid all upfront (more billing options available)

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

Services

Estimate of your Monthly Bill (\$ 49.49)

Choose region: Asia Pacific (Mumbai)

Inbound Data Transfer is Free and Outbound Data Transfer is \$0.09/GB

Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides resizable compute capacity in the cloud. It is designed to make web-scale computing easier for developers. Amazon Elastic Block Store (EBS) provides persistent storage to Amazon EC2 instances.

Compute: Amazon EC2 Instances:

Description	Instances	Usage	Type	Billing Option	Monthly Cost
Web Hosting	1	100 % Utilized/Mo	Windows on t2.medium	On-Demand (No Commitment)	\$ 49.49
<div> <div>+</div> <div>Add New Row</div> </div>					

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
<input checked="" type="radio"/>	On-Demand (No Contract)	---	0.068	49.49	593.88	1781.64
<input type="radio"/>	1 Yr No Upfront Reserved	0.00	0.049	35.70	428.37	1285.10
<input type="radio"/>	1 Yr Partial Upfront Reserved	208.00	0.047	34.64	415.62	1246.84
<input type="radio"/>	1 Yr All Upfront Reserved	410.00	0.047	34.17	410.00	1230.00
<input type="radio"/>	3 Yr No Upfront Reserved	0.00	0.039	28.40	---	1022.30
<input type="radio"/>	3 Yr Partial Upfront Reserved	491.00	0.037	27.29	---	982.44
<input type="radio"/>	3 Yr All Upfront Reserved	951.00	0.036	26.42	---	951.00
<input type="radio"/>	1 Yr No Upfront Convertible	0.00	0.054	39.06	468.66	1405.98
<input type="radio"/>	1 Yr Partial Upfront Convertible	227.00	0.052	37.83	453.89	1361.66
<input type="radio"/>	1 Yr All Upfront Convertible	448.00	0.051	37.34	448.00	1344.00
<input type="radio"/>	3 Yr No Upfront Convertible	0.00	0.042	30.66	---	1103.76
<input type="radio"/>	3 Yr Partial Upfront Convertible	529.00	0.040	29.37	---	1057.23
<input type="radio"/>	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

Services **Estimate of your Monthly Bill (\$ 49.49)**

Choose region: Asia Pacific (Mumbai) Inbound Data Transfer is Free and Outbound Data Transfer is \$0.09/GB

Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides resizable compute capacity in the cloud. It is designed to make web-scale computing easier for developers. Amazon Elastic Block Store (EBS) provides persistent storage to Amazon EC2 instances.

Compute: Amazon EC2 Instances:

Description	Instances	Usage	Type	Billing Option	Monthly Cost
Web Hosting	1	100 % Utilized/Mo	Windows on t2.medium	On-Demand (No Contract)	\$ 49.49
Add New Row					

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

Services **Estimate of your Monthly Bill (\$ 49.49)**

Estimate of Your Monthly Bill

☒ Show First Month's Bill (include all one-time fees, if any)

Below you will see an estimate of your monthly bill. Expand each line item to see cost breakout of each service. To save this bill and input values, click on 'Save and Share' button. To remove the service from the estimate, jump back to the service and clear the specific service's form.

[Export to CSV](#) [Save and Share](#)

Amazon EC2 Service (Asia Pacific (Mumbai))	\$ 49.49
AWS Support (Basic)	\$ 0.00
Total Monthly Payment:	\$ 49.49

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.

AWS Total Cost of Ownership (TCO) Calculator

Use this calculator to compare the cost of running your applications in an on-premises or colocation environment to AWS. Describe your on-premises or colocation configuration to produce a detailed cost comparison with AWS.

Select Currency: United States Dollar

What type of environment are you comparing against? ☒ On-Premises ☐ Colocation

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

Servers

Are you comparing physical servers or virtual machines? ☐ Physical Servers ☒ Virtual Machines

Provide your configuration details:

Server Type	App. Name	Number of VMs	CPU Cores	Memory(GB)	Hypervisor	Guest OS	DB Engine
Non DB		1 - 10000	1 - 32	1 - 256	VMware	Linux	

Total no. of VMs: + Add Row

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

AWS Total Cost of Ownership (TCO) Calculator

Use this calculator to compare the cost of running your applications in an on-premises or colocation environment to AWS. Describe your on-premises or colocation configuration to produce a detailed cost comparison with AWS.

Select Currency: United States Dollar

What type of environment are you comparing against? ☒ On-Premises ☐ Colocation

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

Servers

Are you comparing physical servers or virtual machines? ☐ Physical Servers ☒ Virtual Machines

Provide your configuration details:

Server Type	App. Name	Number of VMs	CPU Cores	Memory(GB)	Hypervisor	Guest OS	DB Engine
Non DB		1 - 10000	1 - 32	1 - 256	VMware	Linux	

Total no.of VMs: + Add Row

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

Use this calculator to compare the cost of running your applications in an on-premises or colocation environment to AWS. Describe your on-premises or colocation configuration to produce a detailed cost comparison with AWS.

Select Currency: United States Dollar

What type of environment are you comparing against? ☒ On-Premises ☐ Colocation

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

Servers

Are you comparing physical servers or virtual machines? ☐ Physical Servers ☒ Virtual Machines

Provide your configuration details:

Server Type	App. Name	Number of VMs	CPU Cores	Memory(GB)	Hypervisor	Guest OS	DB Engine
Non DB	Web Site	1	4	8	VMware	Linux	X
Non DB		1 - 10000	1 - 32	1 - 256	VMware	Linux	X

Total no.of VMs: 1 + Add Row

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

Provide your configuration details:

Server Type	App. Name	Number of VMs	CPU Cores	Memory(GB)	Hypervisor	Guest OS	DB Engine	
Non DB	Web Site	1	4	8	VMware	Linux		X
DB	DB Server	1	4	8	Hyper-V		MySQL	X
Non DB		1 - 10000	1 - 32	1 - 256	VMware	Linux		X

Total no.of VMs: 2

+ Add Row

Storage

Provide your storage footprint details

Storage Type	Raw Storage Capacity	% Accessed Infrequently	Disk Type	
SAN	0 - 1000 TB		SSD	

+ Add Row

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

Provide your configuration details:

Server Type	App. Name	Number of VMs	CPU Cores	Memory(GB)	Hypervisor	Guest OS	DB Engine	
Non DB	Web Site	1	4	8	VMware	Linux		X
DB	DB Server	1	4	8	Hyper-V		MySQL	X
Non DB		1 - 10000	1 - 32	1 - 256	VMware	Linux		X

Total no.of VMs: 2

+ Add Row

Storage

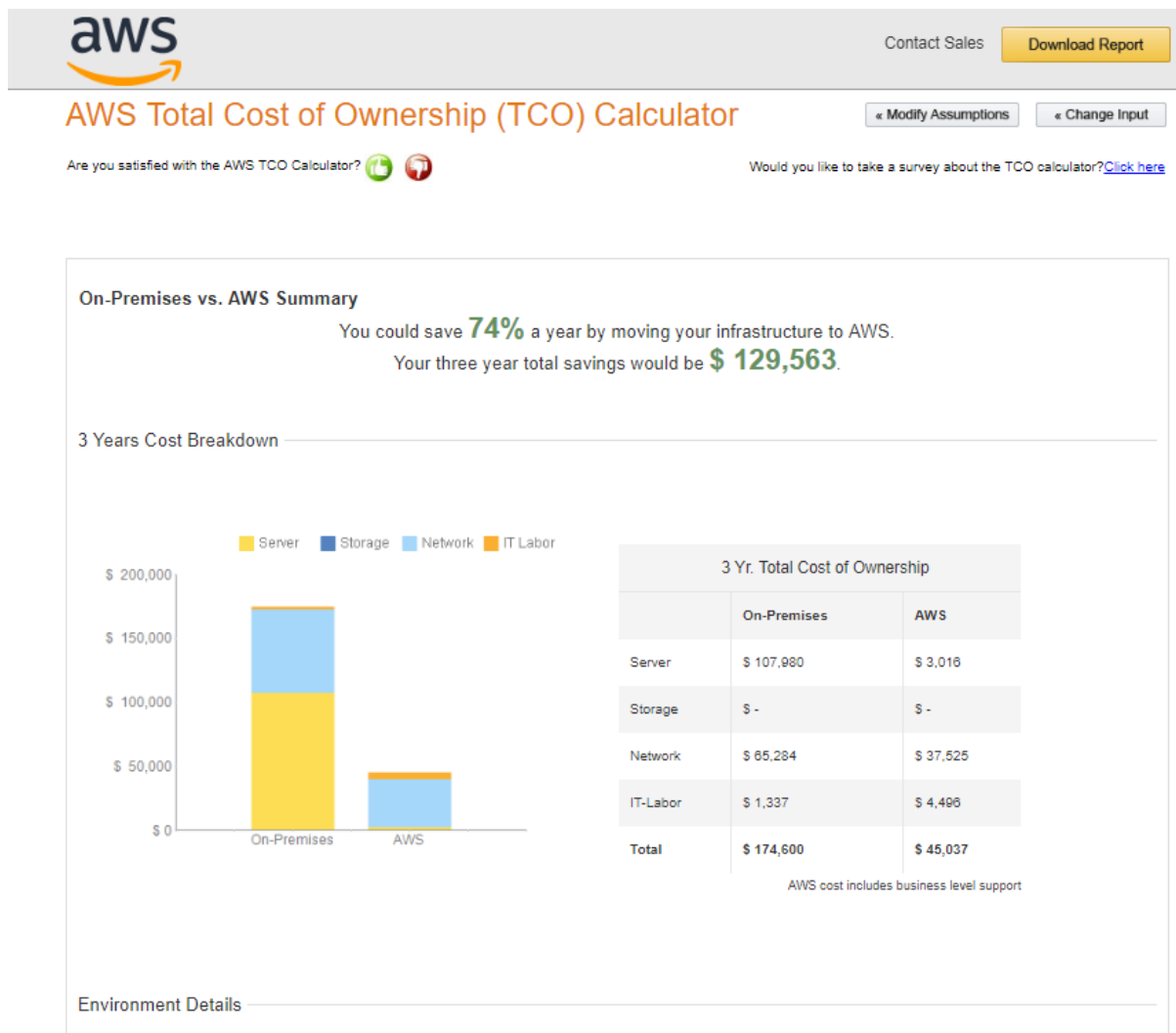
Provide your storage footprint details

Storage Type	Raw Storage Capacity	% Accessed Infrequently	Disk Type	
SAN	0 - 1000 TB		SSD	X
SAN	0 - 1000 TB		SSD	X

+ Add Row

Calculate TCO

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