

Atria Institute of Technology



Department of Information Science and Engineering

Big Data Analytics (18CS72)

Assignment-1

SUBMITTED BY

Name: Shwetha B Raj

USN: 1AT20IS089

Section: 7 ISE - 2

Submission Date: 13/12/2023

Course Handling Faculty Name:

Dr. K S Ananda Kumar
Associate Professor
Dept of ISE, Atria IT.

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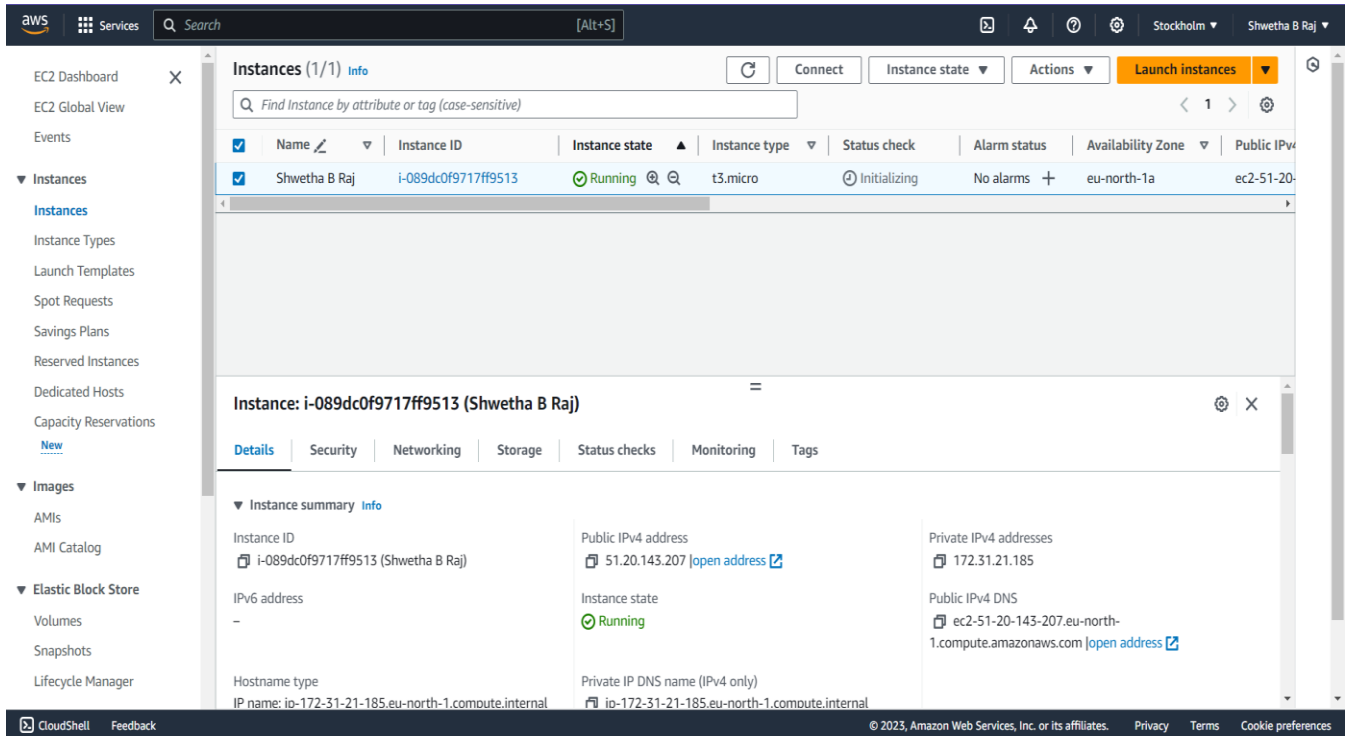
Sl. No	Description
1	1. create an EC2 Linux instance in AWS Cloud /Any cloud INSTANCE NAME - YOUR NAME INSTANCE TYPE - t2.micro/any other also. key pair name- your name storage - 10 GB Take the screenshot of instance running status Mention the private IP address and Public IP address. (Execute this program/concept and take a screenshot of the output)
2	Execute the basic Linux commands/ simple program on the instance (Execute this program and take a screenshot of the output)
3	Create the GitHub Account with your credentials, Same things stored in public repository in Github. Share the assignment in github link.

Note:

1. Minimum 10 Screenshots with proper explanation
2. Minimum no of pages – 10
3. Submit your Assignment soft copy (Word & PDF) to anandakumar.ks@atria.edu.
Subject Line in mail: Student_Name_USN_BDA_Assignment1
4. Share your assignment Github link in Assignment Document.
5. Submit Assignment on or before **27th Nov 2023**.

Instance Creation-01

SCREENSHOTS OF AWS INSTANCE



- Instance:
i-089dc0f9717ff9513 (Shwetha B Raj)
- Instance ID:
i-089dc0f9717ff9513 (Shwetha B Raj)
- Public IPv4 address:
51.20.143.207
- Private IPv4 address:
172.31.21.185
- Instance State:
Running

SCREENSHOTS OF AWS INSTANCE

Instance summary for i-089dc0f9717ff9513 (Shwetha B Raj) Info

Updated less than a minute ago

Instance ID	Public IPv4 address	Private IPv4 addresses
i-089dc0f9717ff9513 (Shwetha B Raj)	51.20.143.207 open address	172.31.21.185
IPv6 address	Instance state	Public IPv4 DNS
-	Running	ec2-51-20-143-207.eu-north-1.compute.amazonaws.com open address
Hostname type	Private IP DNS name (IPv4 only)	Elastic IP addresses
IP name: ip-172-31-21-185.eu-north-1.compute.internal	ip-172-31-21-185.eu-north-1.compute.internal	-
Answer private resource DNS name	Instance type	AWS Compute Optimizer finding
IPv4 (A)	t3.micro	Opt-in to AWS Compute Optimizer for recommendations.
Auto-assigned IP address	VPC ID	Learn more
51.20.143.207 [Public IP]	vpc-043598cb0e11f22fd	Auto Scaling Group name
IAM Role	Subnet ID	-
-	subnet-0ba52fdb29cd21828	
IMDSv2		
Required		

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Instances (1/1) Info

[Find Instance by attribute or tag \(case-sensitive\)](#)

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4
<input checked="" type="checkbox"/>	Shwetha B Raj	i-089dc0f9717ff9513	Running	t3.micro	Initializing	No alarms	eu-north-1a	ec2-51-20-

Instance: i-089dc0f9717ff9513 (Shwetha B Raj)

[Instance details](#) Info

Platform	AMI ID	Monitoring
Amazon Linux (Inferred)	ami-0416c18e75bd69567	disabled
Platform details	AMI name	Termination protection
Linux/UNIX	al2023-ami-2023.2.20231113.0-kernel-6.1-x86_64	Disabled
Stop protection	Launch time	AMI location
Disabled	Wed Dec 13 2023 12:03:30 GMT+0530 (India Standard Time) (1 minute)	amazon/al2023-ami-2023.2.20231113.0-kernel-6.1-x86_64
Instance auto-recovery	Lifecycle	Stop-hibernate behavior
Default	normal	Disabled
AMI Launch index	Key pair assigned at launch	State transition reason
0	shwethabraj	-

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Instances (1/1) Info

Find Instance by attribute or tag (case-sensitive)

Shwetha B Raj

i-089dc0f9717ff9513

Running

t3.micro

Initializing

No alarms

eu-north-1a

ec2-51-20-

Instance: i-089dc0f9717ff9513 (Shwetha B Raj)

0

shwethabraj

Kernel ID

RAM disk ID

Boot mode

Use RBN as guest OS hostname

Host ID

Affinity

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subnets-0ba52fdb29cd21828

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Networking details Info

Public IPv4 address

Public IPv4 DNS

Subnet ID

Availability zone

Use RBN as guest OS hostname

Private IPv4 addresses

Private IP DNS name (IPv4 only)

IPv6 addresses

Carrier IP addresses (ephemeral)

Answer RBN DNS hostname IPv4

VPC ID

Secondary private IPv4 addresses

Outpost ID

Network Interfaces (1) Info

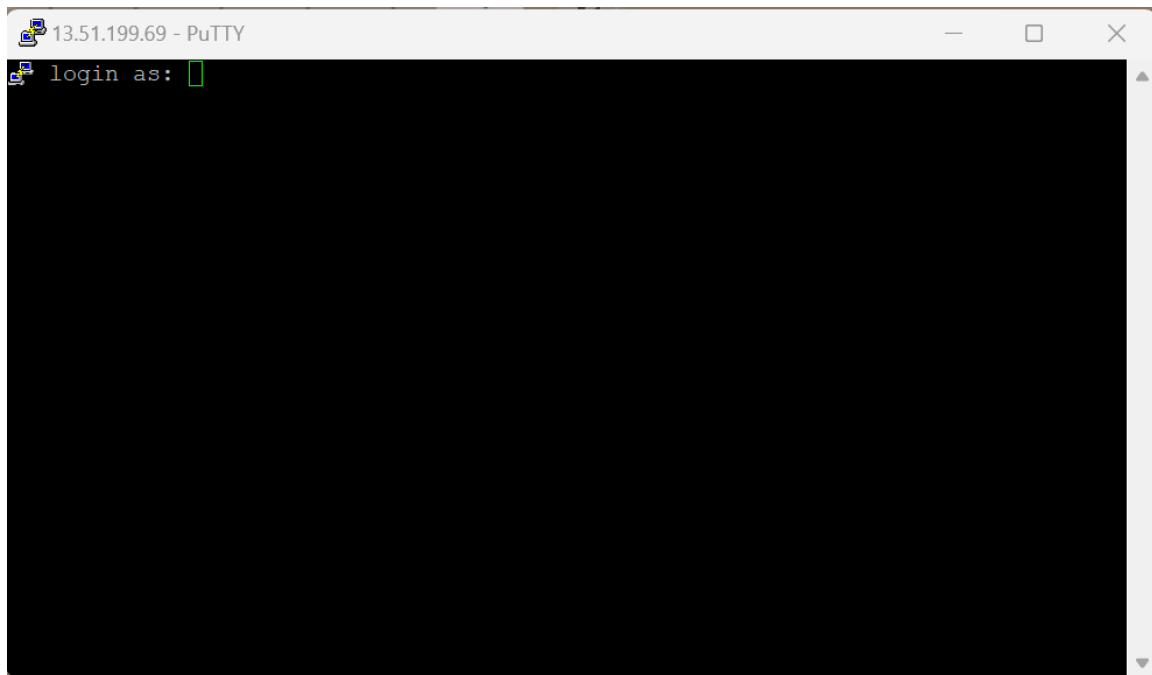
Filter network interfaces

CloudShell

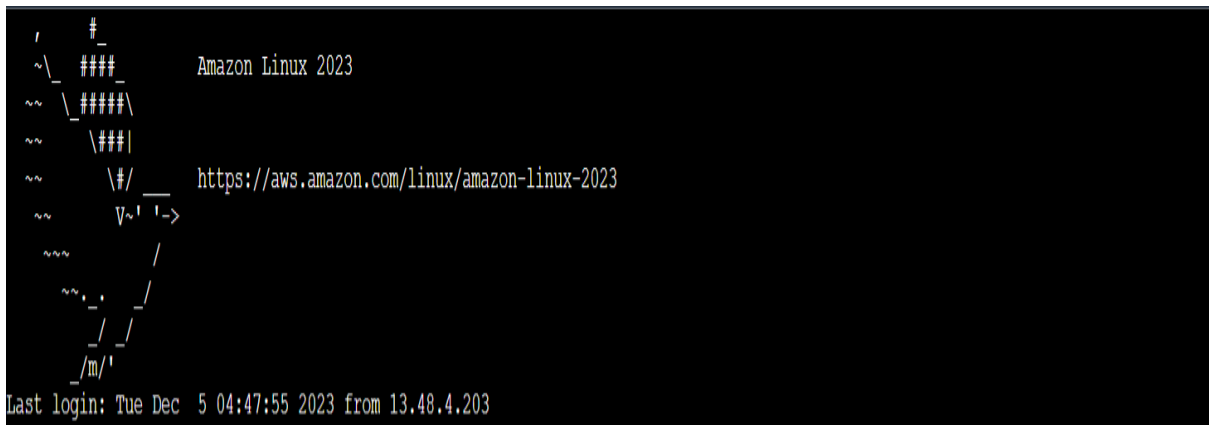
Feedback

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RUNNING SAMPLE PROGRAM ON LINUX INSTANCE



This directs us to this screen now enter the User name that is ec2-user



Ater successful login it authenticates and now we can enter any commands.

SCREENSHOTS FROM COMMANDS



```
aws Services Search [Alt+S] Stockholm Shwetha B Raj
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023
Last login: Tue Dec 5 04:47:55 2023 from 13.48.4.203
[ec2-user@ip-172-31-21-185 ~]$ pwd
/home/ec2-user
[ec2-user@ip-172-31-21-185 ~]$ mkdir shwetha
[ec2-user@ip-172-31-21-185 ~]$ ls
shwetha
[ec2-user@ip-172-31-21-185 ~]$ touch new_file.txt
[ec2-user@ip-172-31-21-185 ~]$ ls
new file.txt shwetha
```

- **pwd:**

pwd is used to present working directory, this gave the output /home/ec2-user

- **mkdir:**

The mkdir (**make directory**) command creates a new directory in the provided location. I have created a directory called new directory

.

- **ls:**

The ls command (**list**) prints a list of the current directory's contents. Therefore, we got the directory created display as output.

- **echo:**
 - The echo command to print arguments to the terminal.
 - Here I have used echo “hello good morning my name is Shwetha”.
 - The >> operator redirects output to a file.

Later I used cat command to find the content in new_file.txt. Therefore, we can see that “hello good morning my name is Shwetha” has been added to new_file.txt
cat file.txt is executed to show that there is no content in file.txt.

- **cp:**
 - The main way to copy files and directories in Linux is through the cp (**copy**) command. cp <source file> <target file>.
 - The source and target files must have different names since the command copies in the same directory. Provide a path before the file name to copy to another location.
 - Here we are copying the content of new_file.txt into file.txt using cp [cp new_file.txt file.txt]
 - Then when we use cat on file.txt it shows “hello this is the content in new_file.txt” so content is successfully copied.
 - Now we make use of echo and >> to add a new line in file.txt i.e “after copying contents from new_file I am adding a new line into file.txt”.
 - Now when cat is used on file.txt both are lines are given as output.

Assignment GitHub Link:

<https://github.com/Shwetha-B-Raj/BDA-Assignment-1>