Name: Arya Angane **PRN : 121A3008**

Experiment No: 7

Aim: - To setup AWS Cloud9 IDE and run python and java program.

Theory:

AWS Cloud9

A cloud IDE for writing, running, and debugging code

AWS Cloud9 allows you to write, run, and debug your code with just a browser. With AWS Cloud9, you have immediate access to a rich code editor, integrated debugger, and built-in terminal with preconfigured AWS CLI. You can get started in minutes and no longer have to spend the time to install local applications or configure your development machine.

How it works

Create an AWS Cloud9 development environment on a new Amazon EC2 instance or connect it to your own Linux server though SSH. Once you've created an AWS Cloud9 environment, you will have immediate access to a rich code editor, integrated debugger, and built-in terminal with pre-configured AWS CLI – all within your browser.

Using the AWS Cloud9 dashboard, you can create and switch between many different AWS Cloud9 environments, each one containing the custom tools, runtimes, and files for a specific project.

Benefits and features

Code with just a browser

AWS Cloud9 allows you to write, run, and debug applications with just a browser and without the need to install or maintain a Desktop IDE.

Code together in real time

AWS Cloud9 makes collaborating on code easy. You can share your development environment with your team in just a few clicks and pair program together.

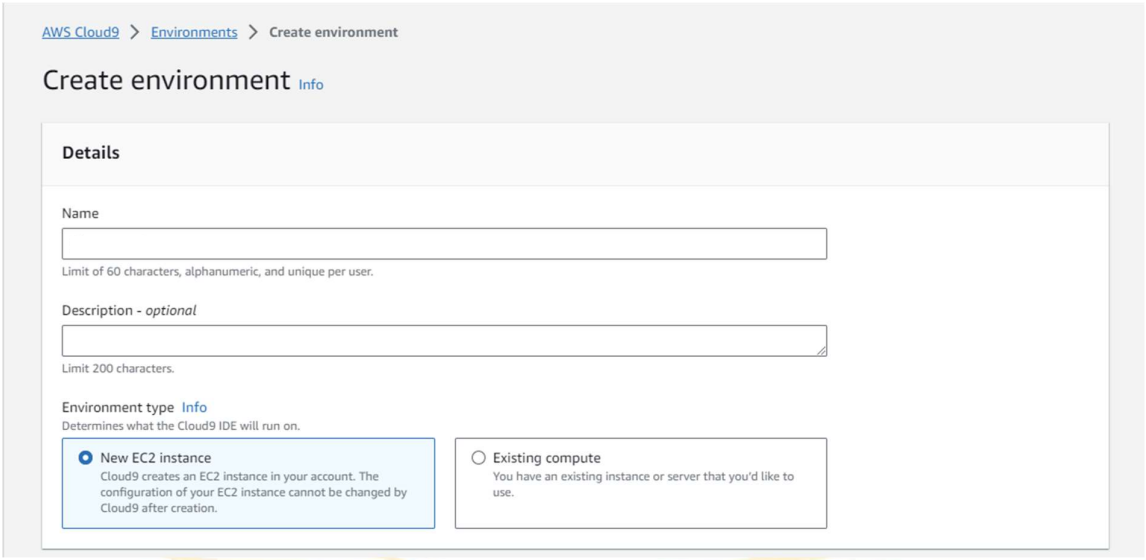
Start new projects quickly

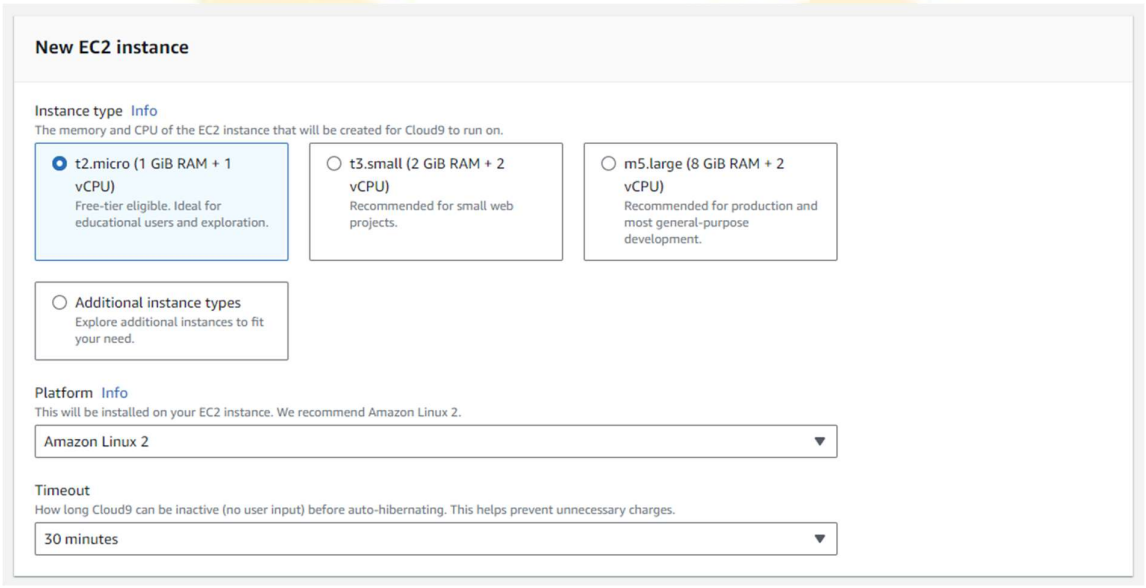
AWS Cloud9 EC2 environments come pre-packaged with tooling for 40+ programming languages, enabling you to start writing code for popular application stacks within minutes.

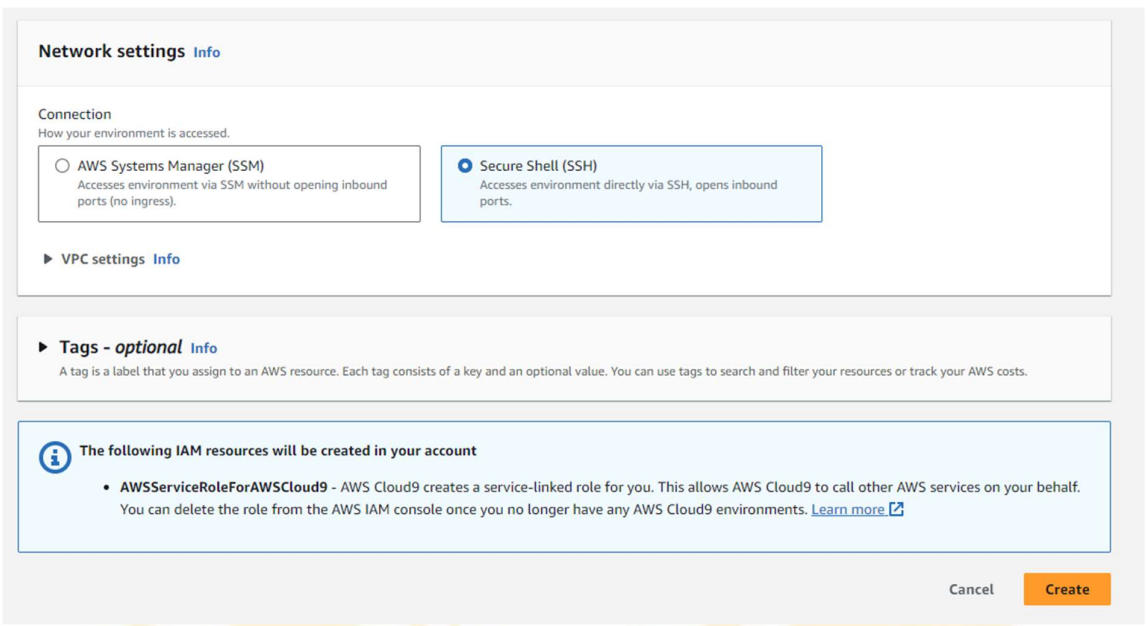
Build serverless applications with ease

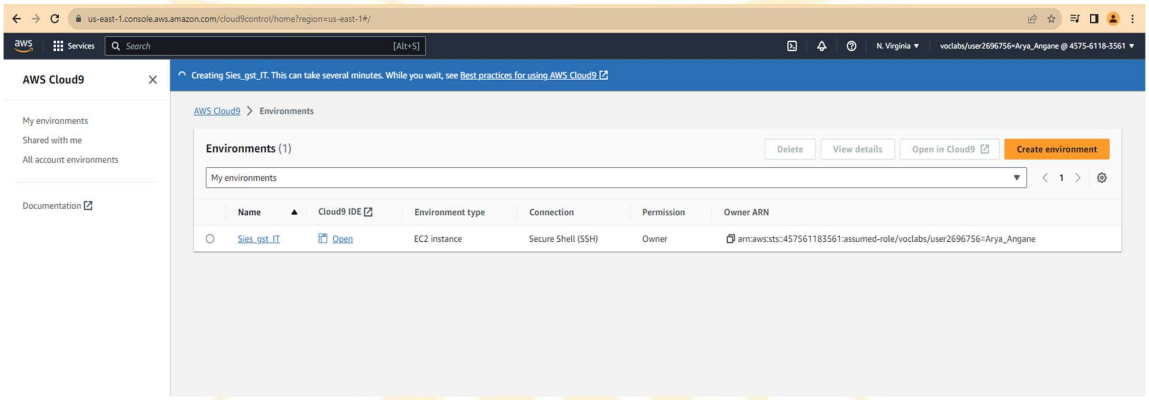
AWS Cloud9 provides a seamless experience for developing serverless applications. It enables you to easily define resources, debug, and switch between local and remote execution of your code.

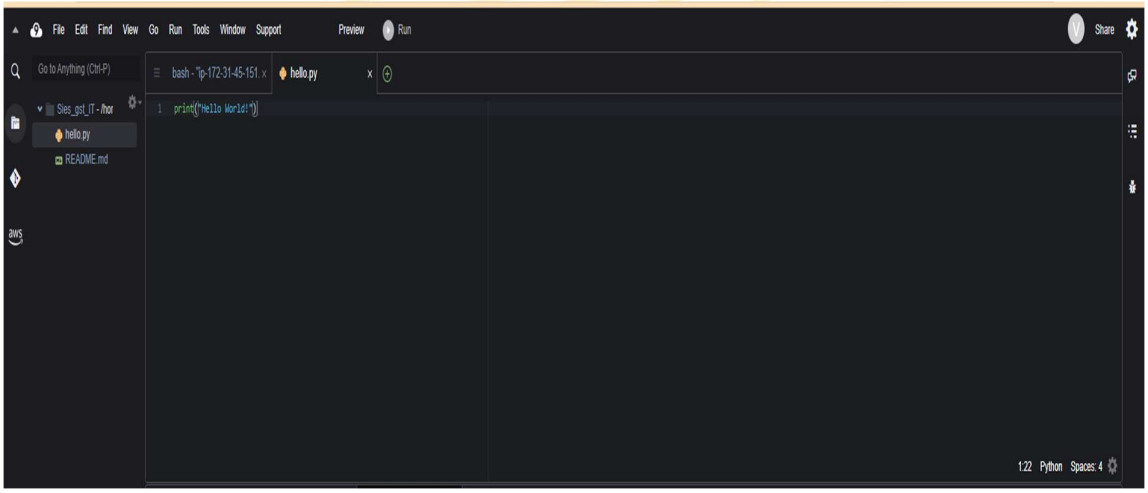
Output :

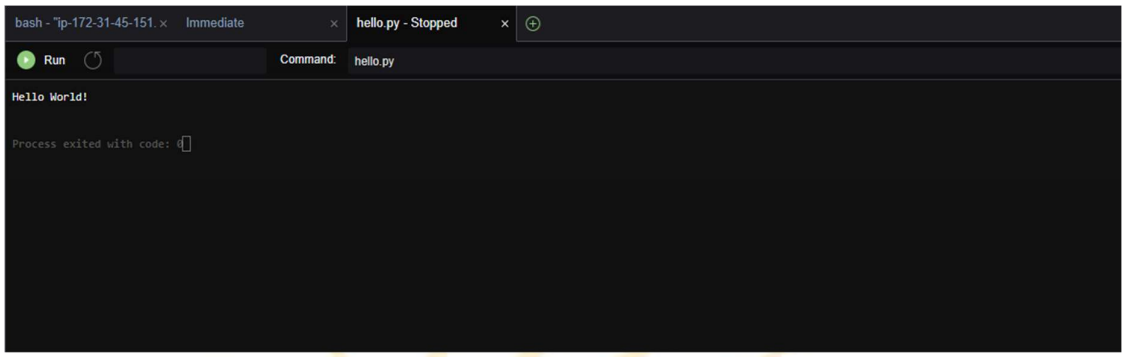

AWS Cloud9 > Environments > Create environment
Create environment Info
Details
Name
Limit of 60 characters, alphanumeric, and unique per user.
Description - optional
Limit 200 characters.
Environment type Info
Determines what the Cloud9 IDE will run on.
New EC2 instance
Cloud9 creates an EC2 instance in your account. The configuration of your EC2 instance cannot be changed by Cloud9 after creation.
Existing compute
You have an existing instance or server that you'd like to use.

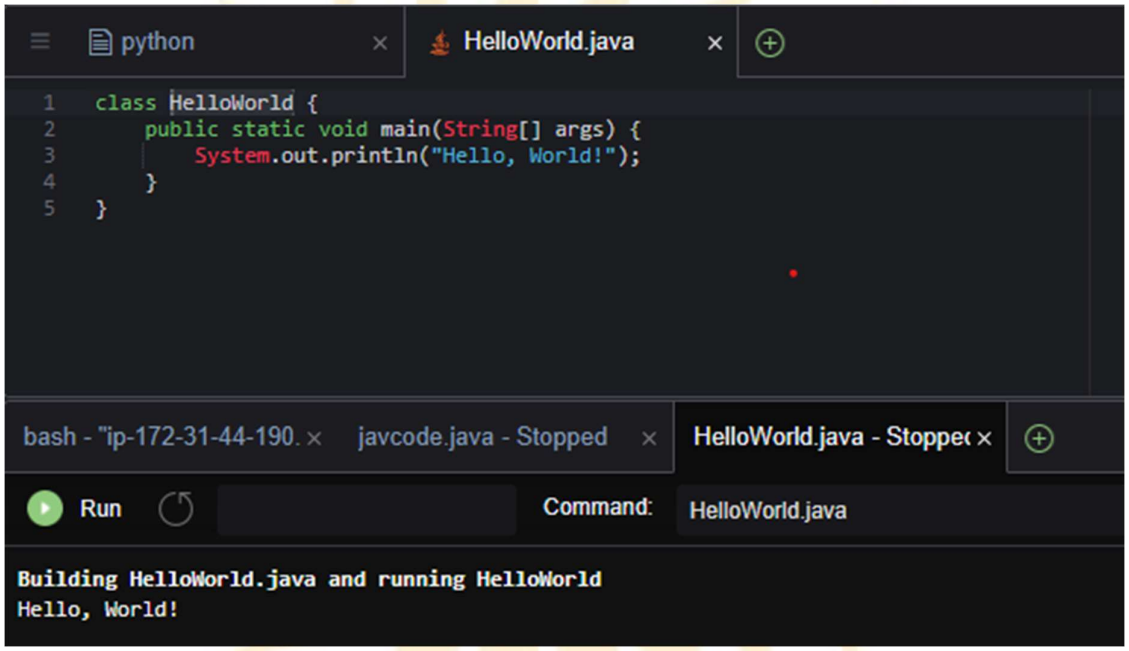

New EC2 instance
Instance type Info
The memory and CPU of the EC2 instance that will be created for Cloud9 to run on.
t2.micro (1 GiB RAM + 1 vCPU)
Free-tier eligible. Ideal for educational users and exploration.
t3.small (2 GiB RAM + 2 vCPU)
Recommended for small web projects.
m5.large (8 GiB RAM + 2 vCPU)
Recommended for production and most general-purpose development.
Additional instance types
Explore additional instances to fit your need.
Platform Info
This will be installed on your EC2 instance. We recommend Amazon Linux 2.
Amazon Linux 2
Timeout
How long Cloud9 can be inactive (no user input) before auto-hibernating. This helps prevent unnecessary charges.
30 minutes


Network settings Info
Connection
How your environment is accessed.
AWS Systems Manager (SSM)
Accesses environment via SSM without opening inbound ports (no ingress).
Secure Shell (SSH)
Accesses environment directly via SSH, opens inbound ports.
VPC settings Info
Tags - optional Info
A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.
The following IAM resources will be created in your account
AWSServiceRoleForAWSCloud9 - AWS Cloud9 creates a service-linked role for you. This allows AWS Cloud9 to call other AWS services on your behalf. You can delete the role from the AWS IAM console once you no longer have any AWS Cloud9 environments. Learn more
Cancel
Create


AWS Cloud9
Creating Sies_gst_IT. This can take several minutes. While you wait, see Best practices for using AWS Cloud9
AWS Cloud9 > Environments
Environments (1)
Delete
View details
Open in Cloud9
Create environment
My environments
Name
Cloud9 IDE
Environment type
Connection
Permission
Owner ARN
Sies_gst_IT
Open
EC2 instance
Secure Shell (SSH)
Owner
arn:aws:sts::457561183561:assumed-role/voclabs/user2696756=Arya_Angane


File Edit Find View Go Run Tools Window Support
Preview
Run
Share
Go to Anything (Ctrl-P)
bash - "ip-172-31-45-151.x
hello.py
print("Hello World!")
Sies_gst_IT - /hor
hello.py
README.md
1:22 Python Spaces: 4





Conclusion:

- Thus we are able to write the programs in different languages in AWS Cloud9 and successfully able to run it.