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Name: Rohit Saini
Erp: 1032200897
Panel: C
RollNo: PC-41 */
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TITLE: Create a resource for one of the cloud services like AWS Lambda or Azure Storage account, comprehend its usage and delete the same.

AIM:

To to able to Create a resource for one of the cloud services like AWS Lambda or Azure Storage account, comprehend its usage and delete the same.

OBJECTIVE:

To acquire knowledge of cloud services

THEORY:

Service Models:
Infrastructure as a Service (IaaS):

Description: IaaS provides virtualized computing resources over the internet. Users have access to virtual machines, storage, and networking components without managing the physical infrastructure.
Use Cases: Suitable for businesses that need scalable computing resources without the complexity of managing physical hardware. Example: Amazon EC2, Microsoft Azure Virtual Machines.
Platform as a Service (PaaS):

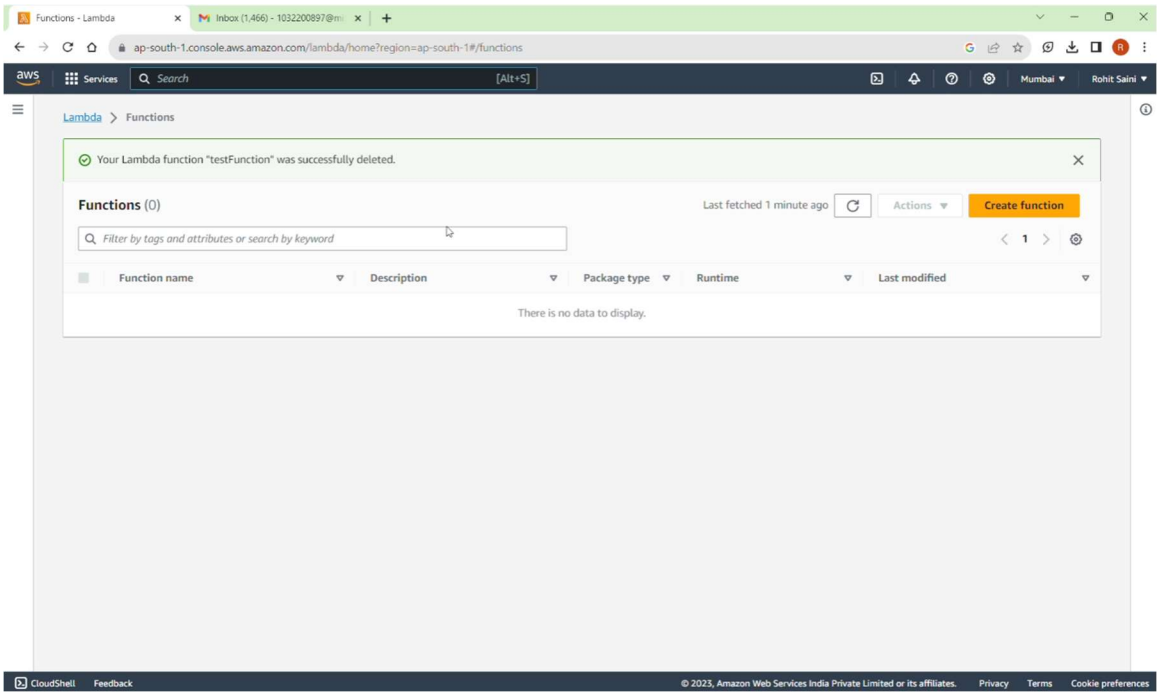
Description: PaaS offers a platform with development tools, databases, and middleware, enabling developers to build, deploy, and manage applications without dealing with the underlying infrastructure.
Use Cases: Ideal for developers focused on application development and deployment without managing the underlying infrastructure. Example: Google App Engine, Heroku.
Software as a Service (SaaS):

Description: SaaS delivers software applications over the internet on a subscription basis. Users can access applications through a web browser without worrying about installation, maintenance, or updates.
Use Cases: Commonly used for business applications, collaboration tools, and productivity software. Examples: Salesforce, Microsoft Office 365, Google Workspace.

Creating a Lambda Function on AWS:
1. AWS Lambda is a serverless computing service for running code without managing servers.
2. Lambda functions can be created through the AWS Management Console, AWS CLI, or SDKs.
3. Functions have triggers that define when and how they execute, such as Amazon S3 bucket events.
4. Each function has a handler function, the entry point for your code.
5. AWS Lambda provides an execution environment, including memory allocation and CPU power.
6. Lambda scales automatically based on incoming requests and is priced based on requests and execution time.

Using Amazon S3 Buckets:
1. Amazon S3 (Simple Storage Service) is a scalable and highly available object storage service by AWS.
2. S3 buckets, the containers for data storage, can be created through the AWS Management Console, AWS CLI, or SDKs.
3. Objects, such as files and data, are stored inside S3 buckets and have unique keys.
4. Bucket policies and access control lists (ACLs) are used to control access to objects in buckets.
5. S3 buckets can be configured to generate events based on object-related activities, like object creation.
6. Amazon S3 offers data lifecycle management, versioning, and high durability by replicating data across Availability Zones.
7. Events in S3 buckets can trigger Lambda functions, enabling serverless automation of tasks.
8. S3 is scalable, durable, and suitable for storing and retrieving data efficiently.

INPUT:
Creation of presentation on Cloud Computing
OUTPUT:
Lambda Function:


Functions - Lambda
Inbox (1,466) - 1032200897@m
ap-south-1.console.aws.amazon.com/lambda/home?region=ap-south-1#/functions
aws
Services
Search
[Alt+S]
Mumbai
Rohit Saini
Lambda
Functions
Your Lambda function "testFunction" was successfully deleted.
Functions (0)
Last fetched 1 minute ago
Actions
Create function
Filter by tags and attributes or search by keyword
1
Function name
Description
Package type
Runtime
Last modified
There is no data to display.
CloudShell
Feedback
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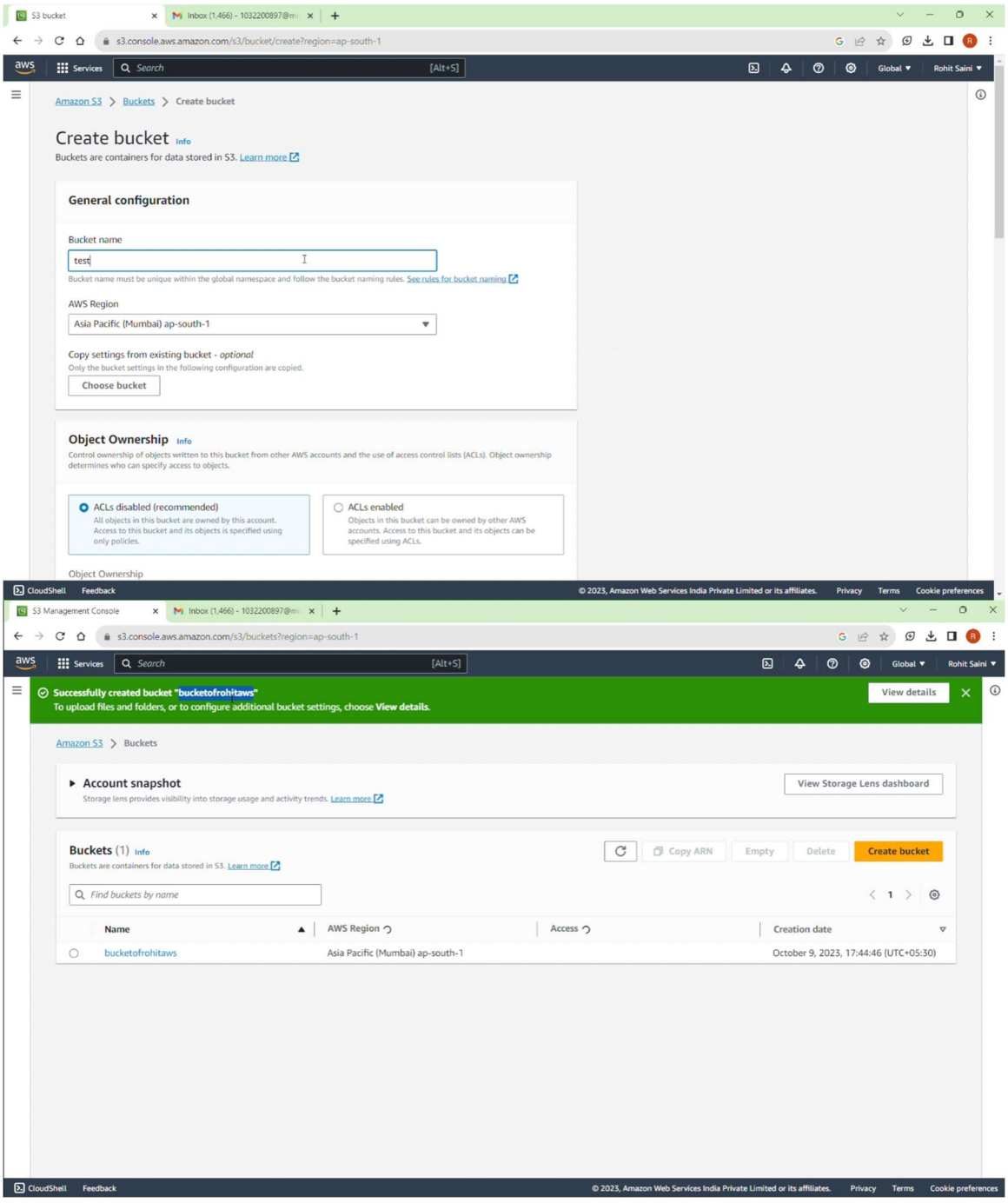
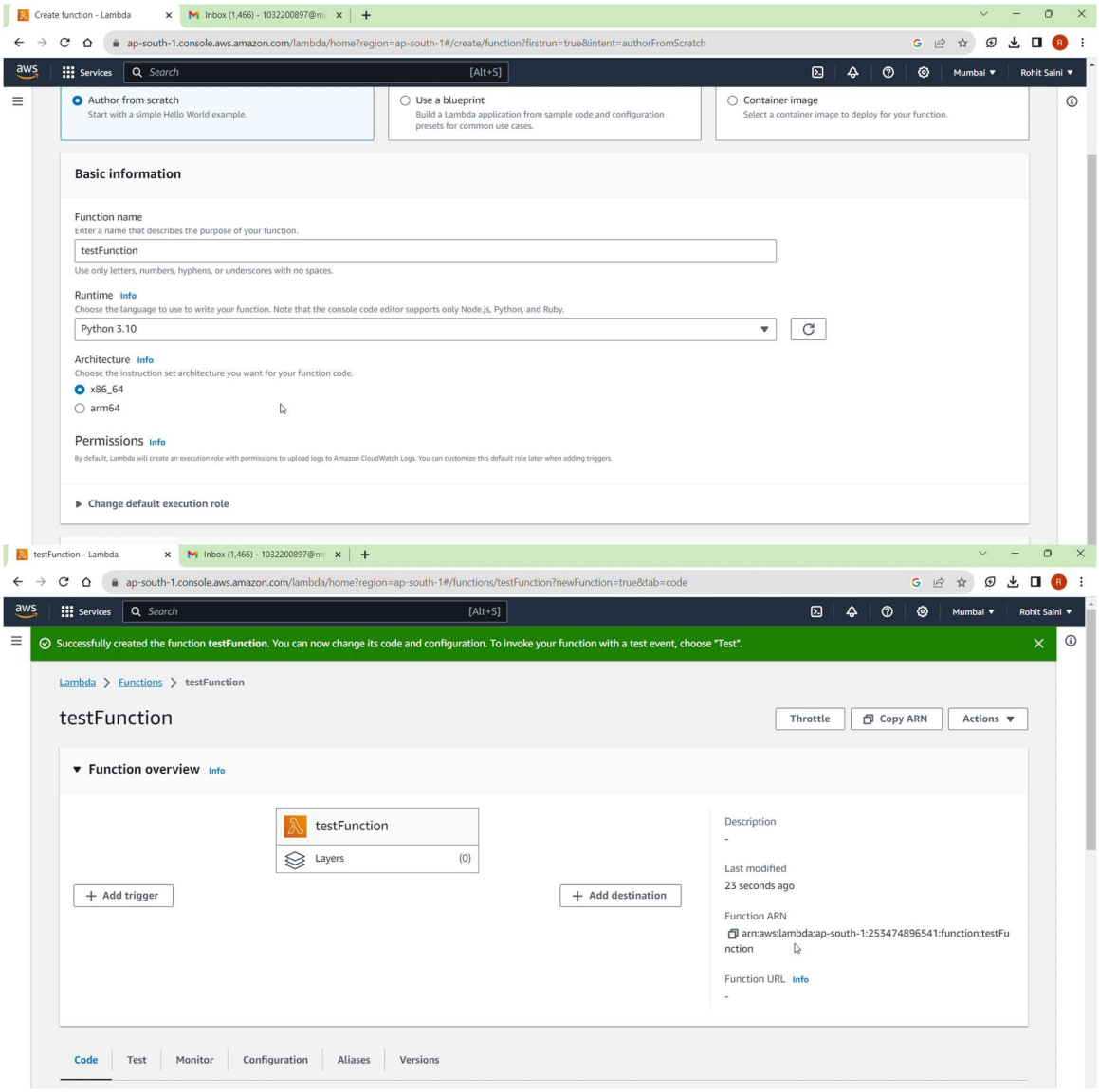
Privacy
Terms
Cookie preferences


S3 bucket
Inbox (1,466) - 1032200897@m
s3.console.aws.amazon.com/s3/bucket/create?region=ap-south-1
aws
Services
Search
[Alt+S]
Global
Rohit Saini
Amazon S3 > Buckets > Create bucket
Create bucket Info
Buckets are containers for data stored in S3. Learn more
General configuration
Bucket name
test
Bucket name must be unique within the global namespace and follow the bucket naming rules. See rules for bucket naming
AWS Region
Asia Pacific (Mumbai) ap-south-1
Copy settings from existing bucket - optional
Only the bucket settings in the following configuration are copied.
Choose bucket
Object Ownership Info
Control ownership of objects written to this bucket from other AWS accounts and the use of access control lists (ACLs). Object ownership determines who can specify access to objects.
ACLs disabled (recommended)
All objects in this bucket are owned by this account. Access to this bucket and its objects is specified using only policies.
ACLs enabled
Objects in this bucket can be owned by other AWS accounts. Access to this bucket and its objects can be specified using ACLs.
Object Ownership
CloudShell
Feedback
© 2023, Amazon Web Services India Private Limited or its affiliates.
Privacy
Terms
Cookie preferences
S3 Management Console
Inbox (1,466) - 1032200897@m
s3.console.aws.amazon.com/s3/buckets?region=ap-south-1
Successfully created bucket "bucketofrohitaws"
To upload files and folders, or to configure additional bucket settings, choose View details.
View details
Amazon S3 > Buckets
Account snapshot
Storage lens provides visibility into storage usage and activity trends. Learn more
View Storage Lens dashboard
Buckets (1) Info
Buckets are containers for data stored in S3. Learn more
Copy ARN
Empty
Delete
Create bucket
Find buckets by name
Name
AWS Region
Access
Creation date
bucketofrohitaws
Asia Pacific (Mumbai) ap-south-1
October 9, 2023, 17:44:46 (UTC+05:30)


Create function - Lambda
Inbox (1,466) - 1032200897@mi
ap-south-1.console.aws.amazon.com/lambda/home?region=ap-south-1#/create/function?firstrun=true&intent=authorFromScratch
aws
Services
Search
[Alt+S]
Mumbai
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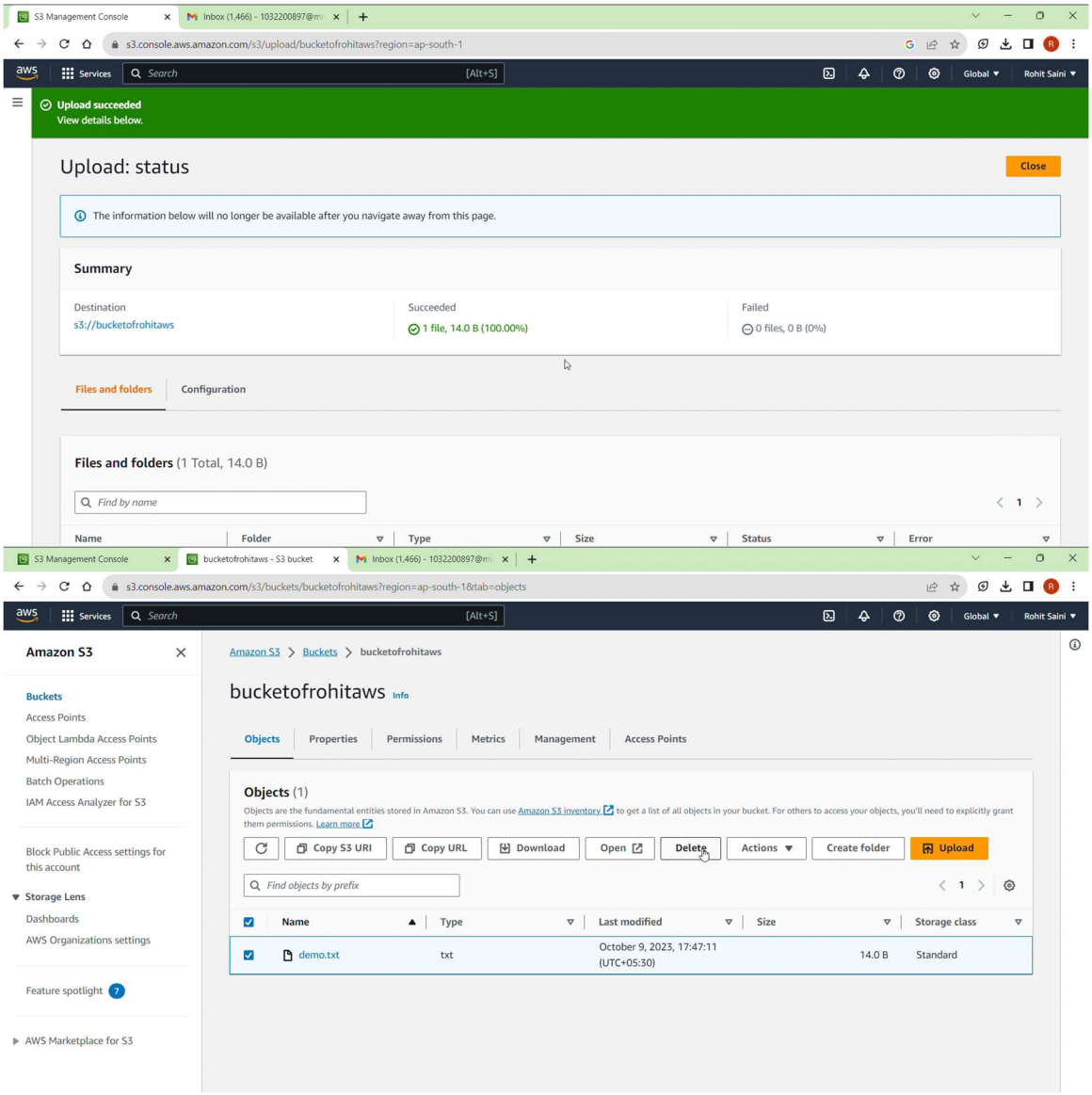
Author from scratch
Start with a simple Hello World example.
Use a blueprint
Build a Lambda application from sample code and configuration presets for common use cases.
Container image
Select a container image to deploy for your function.
Basic information
Function name
Enter a name that describes the purpose of your function.
testFunction
Use only letters, numbers, hyphens, or underscores with no spaces.
Runtime Info
Choose the language to use to write your function. Note that the console code editor supports only Node.js, Python, and Ruby.
Python 3.10
Architecture Info
Choose the instruction set architecture you want for your function code.
x86_64
arm64
Permissions Info
By default, Lambda will create an execution role with permissions to upload logs to Amazon CloudWatch Logs. You can customize this default role later when adding triggers.
Change default execution role

testFunction - Lambda
Inbox (1,466) - 1032200897@mi
ap-south-1.console.aws.amazon.com/lambda/home?region=ap-south-1#/functions/testFunction?newFunction=true&tab=code
aws
Services
Search
[Alt+S]
Mumbai
Rohit Saini
Successfully created the function testFunction. You can now change its code and configuration. To invoke your function with a test event, choose "Test".
Lambda > Functions > testFunction
testFunction
Throttle
Copy ARN
Actions
Function overview Info
testFunction
Layers (0)
Add trigger
Add destination
Description
-
Last modified
23 seconds ago
Function ARN
arn:aws:lambda:ap-south-1:253474896541:function:testFunction
Function URL Info
-
Code
Test
Monitor
Configuration
Aliases
Versions



CONCLUSION:

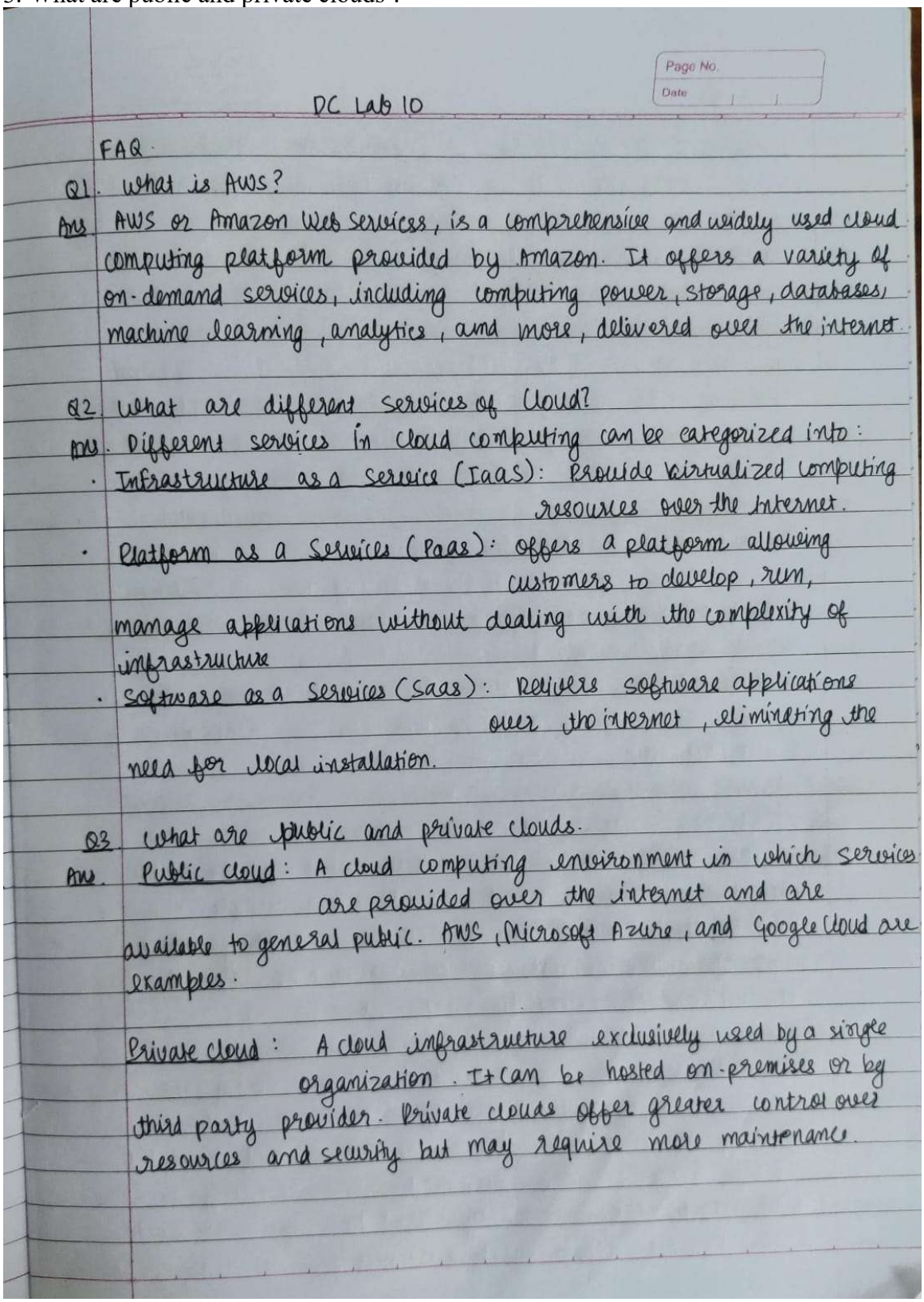
The Resource was successfully created and deleted

PLATFORM: windows

FAQs

1. What is AWS ?
2. What are the different services of Cloud ?

3. What are public and private clouds ?



DC Lab 10

FAQ

Q1. What is AWS?

Ans. AWS or Amazon Web Services, is a comprehensive and widely used cloud computing platform provided by Amazon. It offers a variety of on-demand services, including computing power, storage, databases, machine learning, analytics, and more, delivered over the internet.

Q2. What are different services of Cloud?

Ans. Different services in cloud computing can be categorized into:

- Infrastructure as a Service (IaaS): Provide virtualized computing resources over the internet.
- Platform as a Services (Paas): offers a platform allowing customers to develop, run, manage applications without dealing with the complexity of infrastructure
- Software as a Services (Saas): Delivers software applications over the internet, eliminating the need for local installation.

Q3. What are public and private clouds.

Ans. Public cloud: A cloud computing environment in which services are provided over the internet and are available to general public. AWS, Microsoft Azure, and Google Cloud are examples.

Private cloud: A cloud infrastructure exclusively used by a single organization. It can be hosted on-premises or by third party provider. Private clouds offer greater control over resources and security but may require more maintenance.