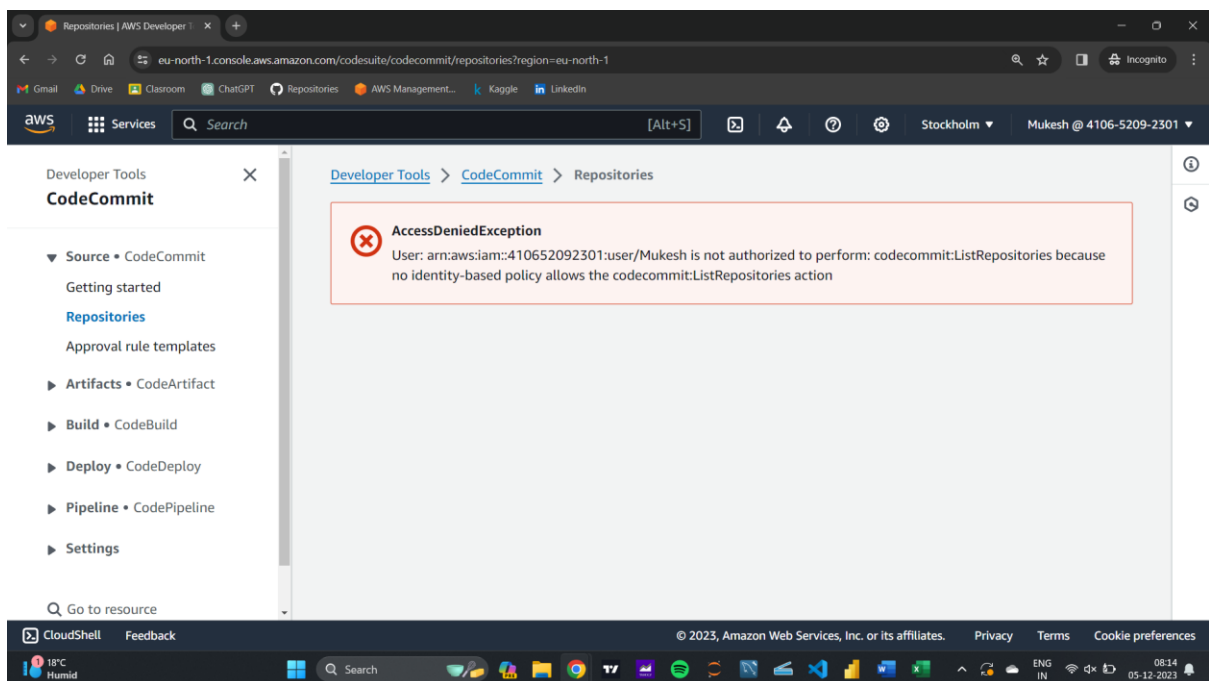
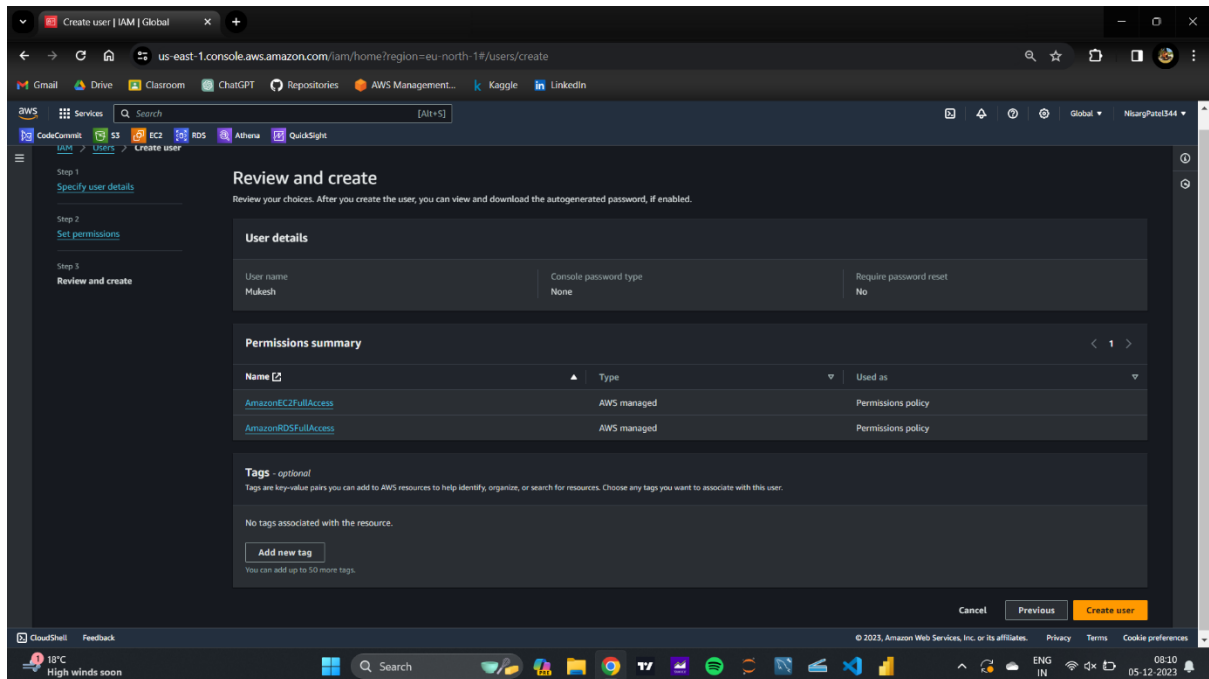


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Question 1.A



eu-north-1.console.aws.amazon.com/codesuite/codecommit/repositories?region=eu-north-1

Developer Tools
CodeCommit

- Source • CodeCommit
 - Getting started
 - Repositories**
 - Approval rule templates
- Artifacts • CodeArtifact
- Build • CodeBuild
- Deploy • CodeDeploy
- Pipeline • CodePipeline
- Settings

Go to resource
Feedback

Repositories info

Clone URL View repository Delete repository Create repository

Search

Name	Description	Last modified
csvfolder	-	2 days ago
repo_exam_rev	-	2 days ago
Q2Assignment	-	8 days ago
CrudOperation	-	1 month ago

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18°C Haze 08:17 05-12-2023

Question 1.B

```
Windows PowerShell
PS C:\Users\nisar\Desktop\Athena> aws s3 mb s3://csvdatabucket06082003
make_bucket: csvdatabucket06082003
PS C:\Users\nisar\Desktop\Athena> aws s3 cp .\data.csv s3://csvdatabucket06082003
upload: .\data.csv to s3://csvdatabucket06082003/data.csv
PS C:\Users\nisar\Desktop\Athena> aws s3 ls s3://csvdatabucket06082003
2023-12-05 08:31:21          90 data.csv
PS C:\Users\nisar\Desktop\Athena> |
```

eu-north-1.console.aws.amazon.com/athena/home?region=eu-north-1#/query-editor/history/6587c87c-fbcc-4b9a-b711-285fb8eb4e3e

CodeCommit S3 EC2 RDS Athena QuickSight

Tables and views

Filter tables and views

Tables (1)

csvdatabucket06082003

Views (0)

SQL Ln 8, Col 1

Run Explain Cancel Clear Create

Query results Query stats

Completed Time in queue: 61 ms Run time: 641 ms Data scanned: 0.09 KB

Results (5)

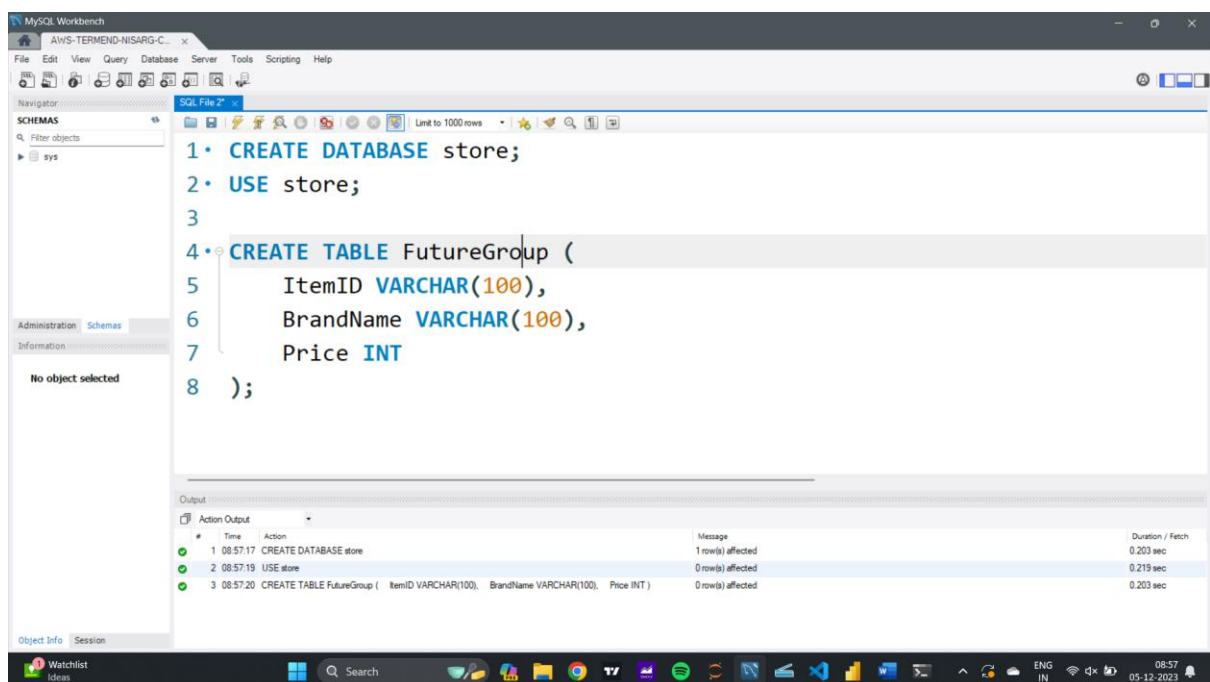
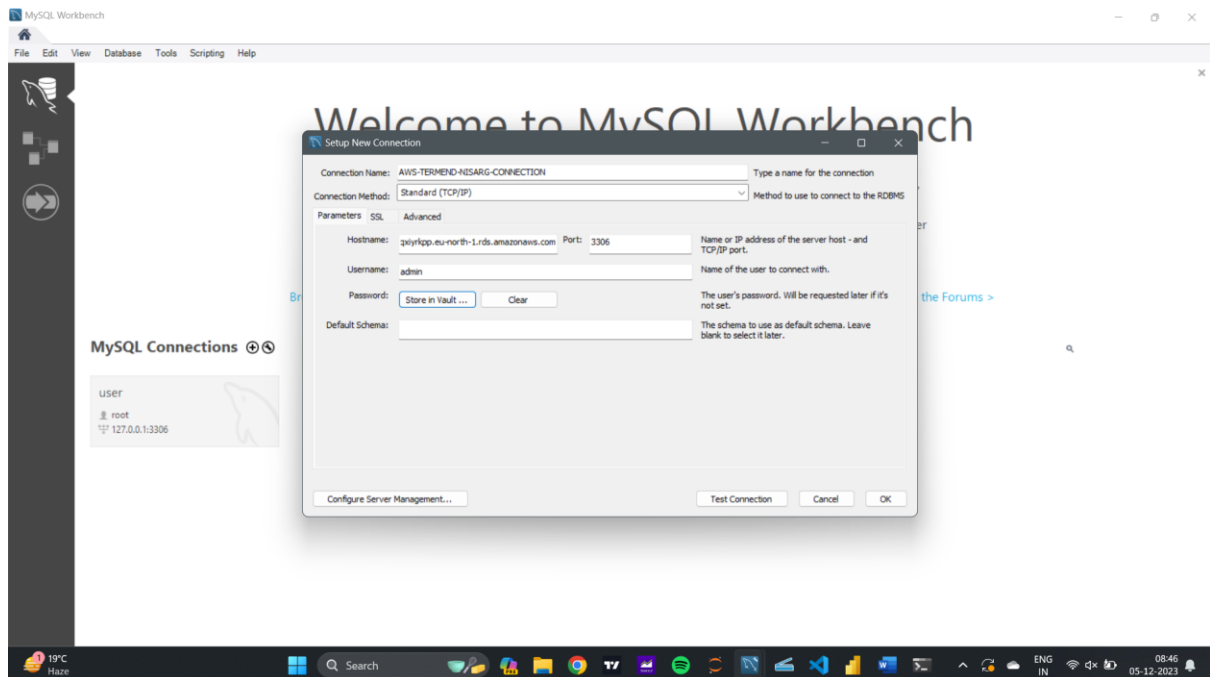
Search rows

#	name	marks
1	Virat Kohli	100
2	Rohit Sharma	100
3	Hardik Pandya	85
4	KL Rahul	85
5	Iyer	70

CloudShell Feedback

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Question 2.B



Python Code Made By Me For Operation RDS Database using Python

```
import mysql.connector

# Establish a connection to the MySQL database
mydb = mysql.connector.connect(
    host="nisarg-termend-50071-database.ctifqxiyrkpp.eu-north-1.rds.amazonaws.com",
    user="admin",
    password="11111111"
)

# Create a cursor to execute SQL queries
mycursor = mydb.cursor()

# Initialize empty attributes list and table_name
attributes = []
table_name = ""

# Execute a query to show available databases
mycursor.execute("SHOW DATABASES")
databases = [db[0] for db in mycursor.fetchall()]

# Function to create a new record
def create_record():
    if not attributes:
        print("No attributes defined. Please select or create a table first.")
        return
    values = []
    placeholders = []
    for attribute in attributes:
        if attribute[0] == 'id':
            continue
        value = input(f"Enter {attribute[0]}: ")
        values.append(value)
        placeholders.append("%s")
    insert_query = f"INSERT INTO {table_name} ("
    insert_query += ", ".join([attribute[0] for attribute in attributes if attribute[0] != 'id'])
    insert_query += ") VALUES ("
    insert_query += ", ".join(placeholders)
    insert_query += ")"
    try:
        mycursor.execute(insert_query, values)
        mydb.commit()
        print("\nRecord created successfully\n")
    except mysql.connector.Error as err:
        print(f"Error: {err}")

# Function to read all records
def read_records():
    mycursor.execute(f"SELECT * FROM {table_name}")
    records = mycursor.fetchall()
    if not records:
        print("No records found")
    else:
        for record in records:
            print(record)

# Function to update a record
def update_record():
    if not attributes:
        print("No attributes defined. Please select or create a table first.")
        return
    record_id = input("Enter the ID of the record you want to update: ")
    values = []
    for attribute in attributes:
        value = input(f"Enter new {attribute[0]}: ")
        values.append(value)
    update_query = f"UPDATE {table_name} SET "
    update_query += ", ".join([f"{attribute[0]} = %s" for attribute in attributes])
    update_query += " WHERE id = %s" # Assuming the primary key is 'id'
    values.append(record_id)
    try:
        mycursor.execute(update_query, values)
        mydb.commit()
        print("\nRecord updated successfully\n")
    except mysql.connector.Error as err:
        print(f"Error: {err}")

# Function to delete a record
def delete_record():
    if not attributes:
        print("No attributes defined. Please select or create a table first.")
        return
    record_id = input("Enter the ID of the record you want to delete: ")
    delete_query = f"DELETE FROM {table_name} WHERE id = %s" # Assuming the primary key is 'id'
```

```

try:
    mycursor.execute(delete_query, (record_id,))
    mydb.commit()
    print("\nRecord deleted successfully\n")
except mysql.connector.Error as err:
    print(f"Error: {err}")

print("Options:")
print("1. Create a new database")
print("2. Select an existing database")
choice = input("Enter your choice (1/2): ")

if choice == "1":
    # Create a new database
    database_name = input("Enter the database name: ")
    mycursor.execute(f"CREATE DATABASE IF NOT EXISTS {database_name}")
    mycursor.execute(f"USE {database_name}")
    table_name = input("Enter the table name (not a reserved keyword): ")
    attributes = []
    while True:
        attribute_name = input("Enter an attribute name (or 'done' to finish): ")
        if attribute_name.lower() == 'done':
            break
        attribute_datatype = input(f"Enter the datatype for {attribute_name}: ")
        attribute_length = input(f"Enter the length for {attribute_name} (or 'max' for maximum length): ")
        attributes.append((attribute_name, attribute_datatype, attribute_length))
    create_table_query = f"CREATE TABLE IF NOT EXISTS {table_name} ("
    create_table_query += f"id INT AUTO_INCREMENT PRIMARY KEY, "
    for attribute in attributes:
        attribute_name, attribute_datatype, attribute_length = attribute
        if attribute_length.lower() == 'max':
            create_table_query += f"{attribute_name}` {attribute_datatype}, "
        else:
            create_table_query += f"{attribute_name}` {attribute_datatype}({attribute_length}), "
    create_table_query = create_table_query[:-2] + ")"
    mycursor.execute(create_table_query)

elif choice == "2":
    # Select an existing database
    print("Available Databases:")
    for db in databases:
        print(f"- {db}")
    selected_database = input("Enter the existing database name: ")
    if selected_database in databases:
        mycursor.execute(f"USE {selected_database}")
        mycursor.execute(f"SHOW TABLES IN {selected_database}")
        tables = [table[0] for table in mycursor.fetchall()]
        if tables:
            print(f"Tables in {selected_database}:")
            for table in tables:
                print(f"- {table}")
            table_name = input("Enter the existing table name: ")
            mycursor.execute(f"DESCRIBE `{table_name}`")
            table_attributes = mycursor.fetchall()
            attributes = [[attr[0], attr[1]] for attr in table_attributes]

            # Check if the 'id' column is in the attributes list and remove it
            attributes = [attr for attr in attributes if attr[0] != 'id']
        else:
            print(f"No tables found in {selected_database}. You can create a new table.")
            table_name = input("Enter the table name: ")
    else:
        print("Database not found. You can create a new database.")
        database_name = input("Enter the database name: ")

while True:
    print("\nCRUD Operations:")
    print("1. Create a new record")
    print("2. Read all records")
    print("3. Update a record")
    print("4. Delete a record")
    print("5. Quit\n")
    choice = input("Enter your choice (1/2/3/4/5): ")
    if choice == "1":
        create_record()
    elif choice == "2":
        read_records()
    elif choice == "3":
        update_record()
    elif choice == "4":
        delete_record()
    elif choice == "5":
        break
    else:
        print("Invalid choice. Please enter a valid option.")

# Close the database connection
mydb.close()

```

The screenshot shows a Jupyter Notebook running on a local host. The code cell contains the following text:

```
172 mydb.close()
173
Options:
1. Create a new database
2. Select an existing database
Enter your choice (1/2): 2
Available Databases:
- information_schema
- mysql
- performance_schema
- store
- sys
Enter the existing database name: store
Tables in store:
- FutureGroup
Enter the existing table name: FutureGroup

CRUD Operations:
1. Create a new record
2. Read all records
3. Update a record
4. Delete a record
5. Quit

Enter your choice (1/2/3/4/5):1
Enter ItemID: A140
```

The interface includes a top bar with the Jupyter logo, the notebook name 'NisargAWS50071', and a 'Logout' button. Below the top bar is a menu bar with 'File', 'Edit', 'View', 'Insert', 'Cell', 'Kernel', 'Widgets', and 'Help'. A toolbar with icons for file operations and execution is located below the menu bar. The bottom of the notebook shows a Windows taskbar with various application icons and a system clock displaying 08:59 on 05-12-2023.

The screenshot shows the same Jupyter Notebook interface as the previous one, but with the following text in the code cell:

```
Enter your choice (1/2/3/4/5):1
Enter ItemID: A140
Enter BrandName: Nestle
Enter Price: 240

Record created successfully

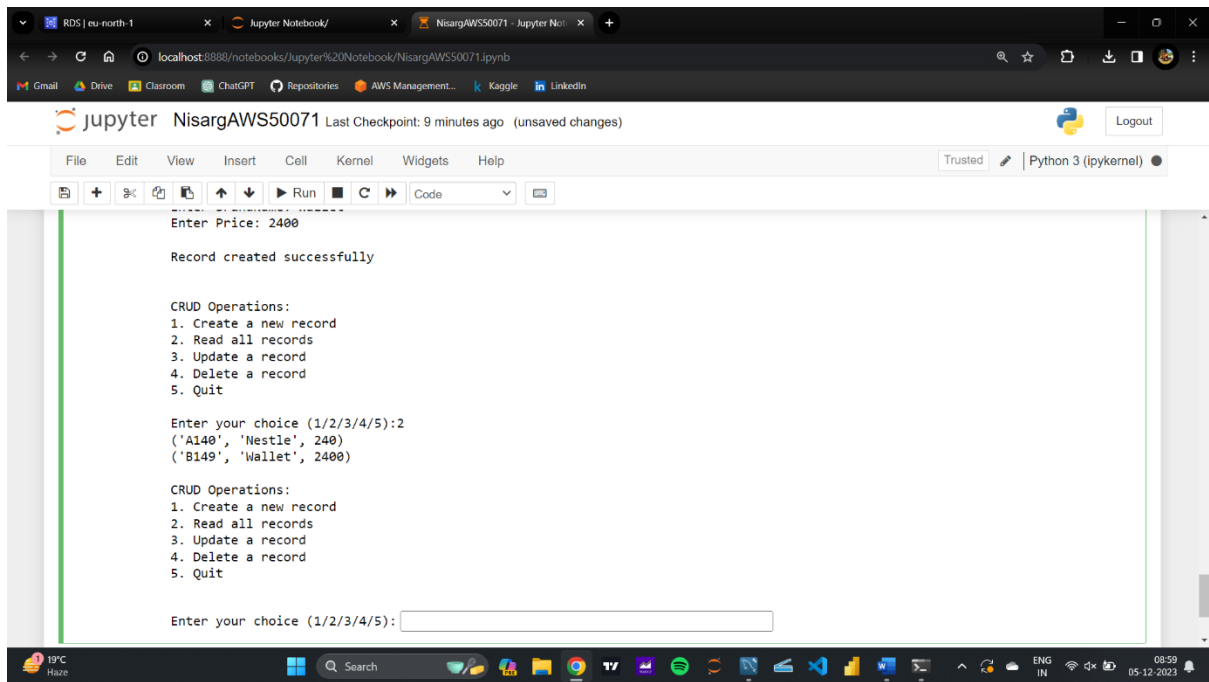
CRUD Operations:
1. Create a new record
2. Read all records
3. Update a record
4. Delete a record
5. Quit

Enter your choice (1/2/3/4/5):1
Enter ItemID: B149
Enter BrandName: Wallet
Enter Price: 2400

Record created successfully

CRUD Operations:
1. Create a new record
```

The interface elements, including the top bar, menu bar, toolbar, and Windows taskbar, are identical to the previous screenshot.



```
Enter your choice (1/2/3/4/5):2  
( 'A140', 'Nestle', 240)  
( 'B149', 'Wallet', 2400)
```

This is the screenshot from the upper photo to check precisely, You can verify from upper screenshot also, this is just to visualize easy