

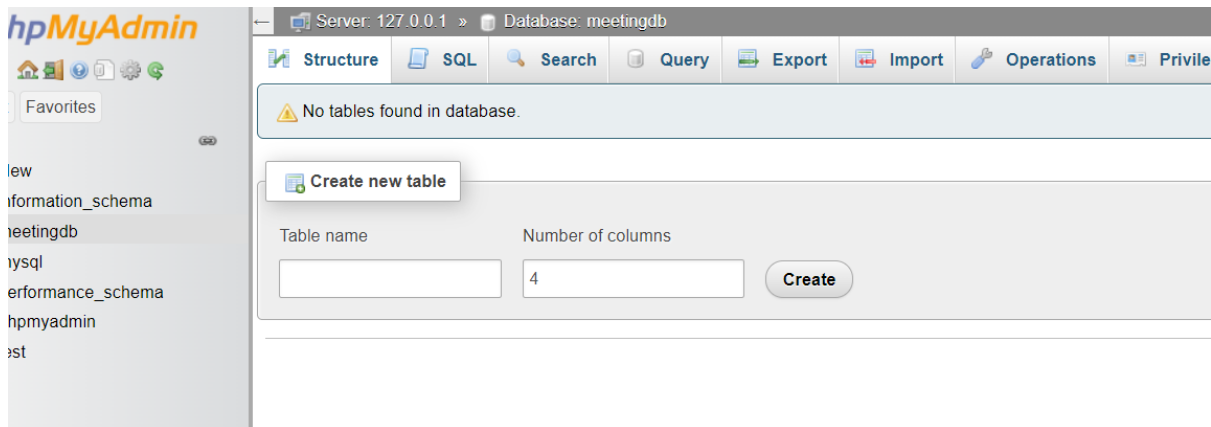
JDBC- Experiment 11

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Batch 6

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Q1. Create a table named "Meeting" having the columns (MeetingID, ScheduledTime, ScheduledDate, participantID, NameOfParticipant, participantDateBirth, Email, Mobile). "participantID" is set auto increment.

```
import java.sql.*;
```

```
public class App {
```

```
    public static void main(String[] args) throws Exception {
```

```
        Class.forName("com.mysql.cj.jdbc.Driver");
```

```
        Connection conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/meetingDB",  
"root", "");
```

```
        Statement statement = conn.createStatement();
```

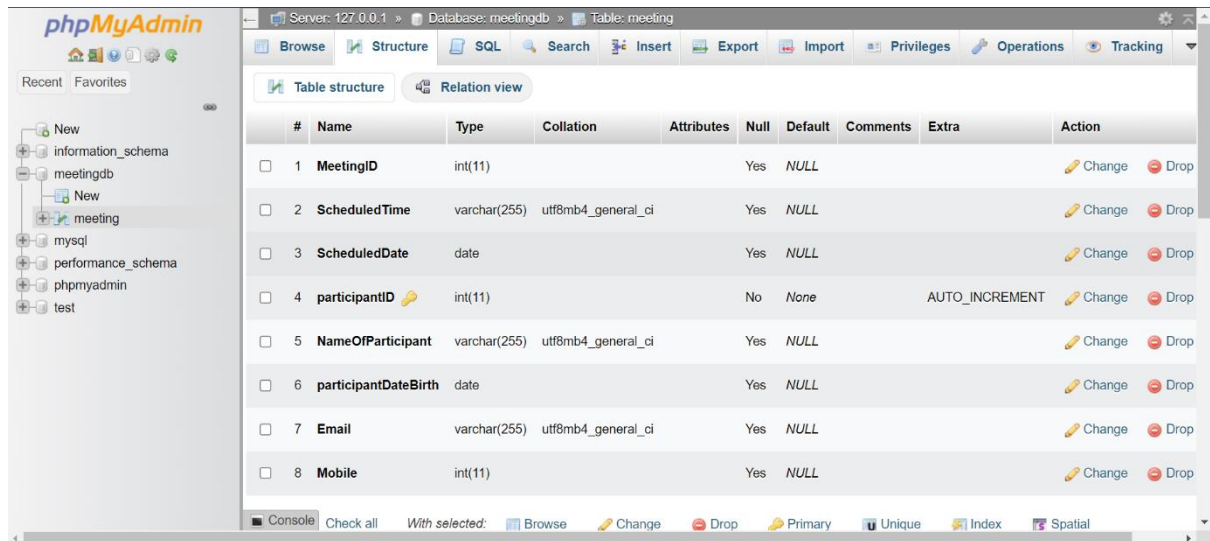
```
        statement.executeUpdate("CREATE TABLE Meeting (MeetingID int, ScheduledTime  
varchar(255), ScheduledDate Date, participantID int AUTO_INCREMENT , NameOfParticipant  
varchar(255), participantDateBirth Date, Email varchar(255), Mobile int, PRIMARY  
KEY(participantID))");
```

```
    }
```

```
}
```

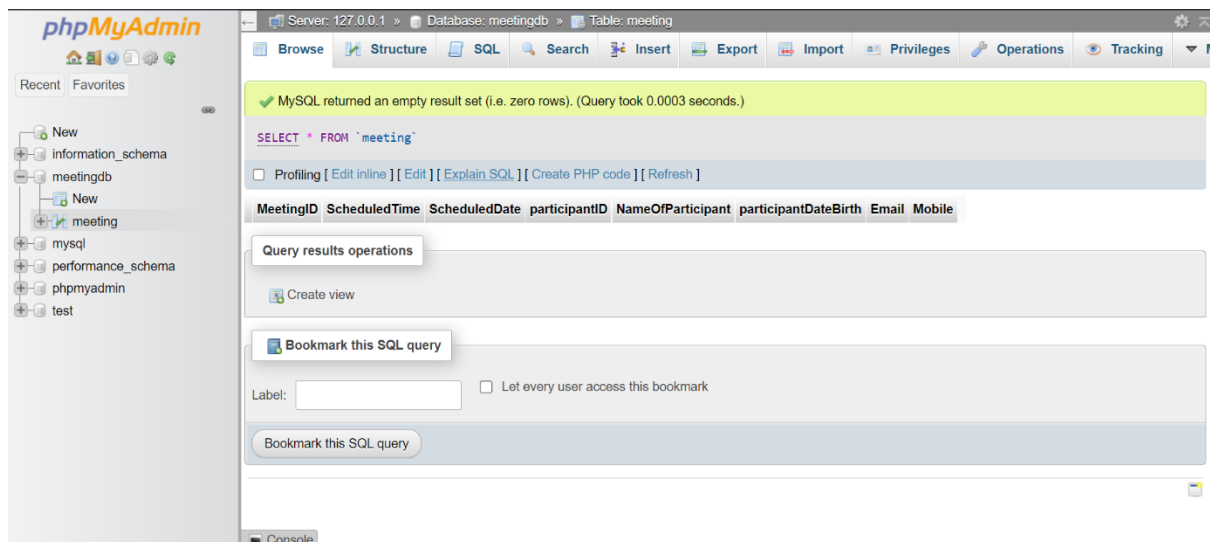
Output:

```
C:\Users\Vamika> cd C:\java programs
C:\java programs> javac App.java
```



The screenshot shows the phpMyAdmin interface. On the left is the database navigation tree with 'meetingdb' selected and the 'meeting' table highlighted. The main panel shows the 'Table structure' view for the 'meeting' table. The table has 8 columns: MeetingID, ScheduledTime, ScheduledDate, participantID, NameOfParticipant, participantDateBirth, Email, and Mobile. Each column has a checkbox, a pencil icon for 'Change', and a red circle with a minus sign for 'Drop'.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 MeetingID	int(11)			Yes	NULL			
<input type="checkbox"/>	2 ScheduledTime	varchar(255)	utf8mb4_general_ci		Yes	NULL			
<input type="checkbox"/>	3 ScheduledDate	date			Yes	NULL			
<input type="checkbox"/>	4 participantID	int(11)			No	None		AUTO_INCREMENT	
<input type="checkbox"/>	5 NameOfParticipant	varchar(255)	utf8mb4_general_ci		Yes	NULL			
<input type="checkbox"/>	6 participantDateBirth	date			Yes	NULL			
<input type="checkbox"/>	7 Email	varchar(255)	utf8mb4_general_ci		Yes	NULL			
<input type="checkbox"/>	8 Mobile	int(11)			Yes	NULL			



The screenshot shows the phpMyAdmin interface with the SQL query results for the 'meeting' table. The query is 'SELECT * FROM `meeting`'. The results are displayed in a table with 8 columns: MeetingID, ScheduledTime, ScheduledDate, participantID, NameOfParticipant, participantDateBirth, Email, and Mobile. The table is empty, and a message at the top says 'MySQL returned an empty result set (i.e. zero rows). (Query took 0.0003 seconds.)'. Below the table are options for 'Query results operations' and a 'Bookmark this SQL query' button.

MeetingID	ScheduledTime	ScheduledDate	participantID	NameOfParticipant	participantDateBirth	Email	Mobile
-----------	---------------	---------------	---------------	-------------------	----------------------	-------	--------

Q2. Create a stored procedure that can be invoked to insert records to the table with proper data (5 records).

```
import java.sql.*;
import java.util.Scanner;
class Sample{
    public static void main(String[] args) {
        try{
            //Connect to database
            Class.forName("com.mysql.cj.jdbc.Driver");
```

```

Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/meetingdb", "root", "");
//Create Proccedure
String query = "CREATE or REPLACE PROCEDURE `inrow`(MeetingID int,
ScheduledTime varchar(255), ScheduledDate varchar(10) , NameOfParticipant varchar(255),
participantDateBirth varchar(10), Email varchar(255), Mobile varchar(10)) " +
"BEGIN "+
" INSERT INTO meeting (MeetingID, ScheduledTime, ScheduledDate,
NameOfParticipant, participantDateBirth, Email, Mobile) VALUES(MeetingID,
ScheduledTime, ScheduledDate, NameOfParticipant, participantDateBirth, Email, Mobile);
"+
"END";
Statement stmt = con.createStatement();
stmt.execute(query);
System.out.println("Proccedure Created");
// Input and insert
Scanner obj = new Scanner(System.in);
int mid;
String scht,schd,np,pd,email,mob;
CallableStatement stmtm = con.prepareCall("{ call inrow(?,?,?,?,?,?)}");
for (int i = 0; i < 5; i++) {
    System.out.println("MeetingId");
    mid = obj.nextInt();
    stmtm.setInt(1, mid);

    System.out.println("ScheduledTime");
    scht = obj.next();
    stmtm.setString(2, scht);

    System.out.println("ScheduledDate");
    schd = obj.next();
    stmtm.setString(3, schd);

    System.out.println("NameofPaticipant");
    np = obj.next();
    stmtm.setString(4, np);

    System.out.println("ParticipantDateBirth");
    pd = obj.next();
    stmtm.setString(5, pd);

    System.out.println("Email");
    email = obj.next();
    stmtm.setString(6, email);

    System.out.println("Mobile");
    mob = obj.next();
    stmtm.setString(7, mob);

```

```

        stmtm.execute();
    }
    obj.close();
    con.close();
} catch (Exception e) {
    System.out.println(e);
}

}

```

Output:

```

Proccedure Created
MeetingId
14
ScheduledTime
14:10
ScheduledDate
14-10-2022
NameofPaticipant
a
ParticipantDateBirth
10-9-1998
Email
mail@mail
Mobile
9898989898
MeetingId
14
ScheduledTime
14:10
ScheduledDate
14-10-2022
NameofPaticipant
b
ParticipantDateBirth
12-01-1989
Email
em@mail
Mobile

```

phpMyAdmin

Server: 127.0.0.1 » Database: meetingdb » Table: meeting

Browse Structure SQL Search Insert Export Import Privileges Operations More

Showing rows 1 - 5 (5 total, 50 rows 0.0000 seconds.)

FROM `meeting`

Editing [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None



	MeetingID	ScheduledTime	ScheduledDate	participantID	NameOfParticipant	participantDateBirth	Email	Mobile
Edit Copy Delete	14	14:10	14-10-2022	1	a	10-9-1998	mail@mail	9898989898
Edit Copy Delete	14	14:10	14-10-2022	2	b	12-01-1989	em@mail	9999999999
Edit Copy Delete	14	14:10	14-10-2022	3	c	05-05-1999	tw@mail	8888888888
Edit Copy Delete	15	20-12-2022	20-12-2022	4	t	12-12-1995	m@mail	9765432180
Edit Copy Delete	18	16:00	15-01-2023	5	nt	04-07-1994	ma@mail	9087654321





☐ Check all With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Console Operations

Routines

☐ Check all  Export  Drop

	Name	Type	Returns	
<input type="checkbox"/>	inrow	PROCEDURE		 Edit  Execute  Export  Drop

Edit

Routine name

Type
PROCEDURE

	Direction	Name	Type
‡	IN	MeetingID	INT
‡	IN	ScheduledTime	VARCHAR
‡	IN	ScheduledDate	VARCHAR
‡	IN	NameOfParticipant	VARCHAR
‡	IN	participantDateBirth	VARCHAR
‡	IN	Email	VARCHAR
‡	IN	Mobile	VARCHAR

Go Close

Q3. Get the "MeetingID" from the user. Display the names of all the participants for the meeting with the given MeetingID on the console, preceded by the message, "Names of participants in meeting 1144".

Code:

```
import java.sql.*;
import java.util.Scanner;

public class App {
    public static void main(String[] args) throws Exception {

        Class.forName("com.mysql.cj.jdbc.Driver");

        Connection conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/meetingDB",
"root", "");

        Statement statement = conn.createStatement();

        Scanner scanner = new Scanner(System.in);

        System.out.println("Enter the meeting ID: ");
        int meetingID = scanner.nextInt();

        scanner.close();

        String query = String.format("SELECT NameOfParticipant FROM Meeting WHERE meetingID
= %d;", meetingID);

        ResultSet resSet = statement.executeQuery(query);

        System.out.println(String.format("Names of participants in meeting %d: ", meetingID));
        while (resSet.next()){
            System.out.println(resSet.getString("NameOfParticipant"));
        }
    }
}
```

←T→	MeetingID	ScheduledTime	ScheduledDate	participantID	NameOfParticipant	participantDateBirth	Email
<input type="checkbox"/> Edit Copy Delete	1105	10:00	2022-12-04	1	John	1998-10-10	john@gmail
<input type="checkbox"/> Edit Copy Delete	1105	10:00	2022-12-04	2	Mary	2000-04-20	mary@gmail
<input type="checkbox"/> Edit Copy Delete	1105	10:00	2022-12-04	3	Alex	1994-04-01	Alex@gmail
<input type="checkbox"/> Edit Copy Delete	1105	10:00	2022-12-04	4	Anna	2000-08-01	Anna@gmail
<input type="checkbox"/> Edit Copy Delete	1105	10:00	2022-12-04	5	Harry	1996-02-10	Harry@gmail
<input type="checkbox"/> Edit Copy Delete	1105	10:00	2022-12-04	6	Kevin	1992-12-12	Kevin@gmail

Q4. Insert a new participant using only the participant's name. Do not provide the "participantID". Determine the ID that was assigned to the new participant and display it on the console (the statement that displays the ID should display the name of the new participant as well).

Code:

```
import java.sql.*;
import java.util.Scanner;

import javax.management.Query;
class Sample{
    public static void main(String[] args) {
        try{
            //Connect to database
            Class.forName("com.mysql.cj.jdbc.Driver");
            Connection con =
            DriverManager.getConnection("jdbc:mysql://localhost:3306/meetingdb", "root", "");
            Scanner obj = new Scanner(System.in);
            System.out.println("Name");
            String name = obj.next();
            String query1 = "INSERT INTO meeting (NameOfParticipant) VALUES(?)",query2;
            PreparedStatement stmt = con.prepareStatement(query1);
            stmt.setString(1, name);
            stmt.execute();
            System.out.println("Query Executed");
            query2 = "SELECT * from meeting WHERE participantId =(SELECT
            MAX(participantID) from meeting)";
            Statement stmtm = con.createStatement();
            ResultSet rs = stmtm.executeQuery(query2);
            while(rs.next()){

                System.out.println("Name: "+rs.getString(5)+" participantId: "+rs.getInt(4));
            }
            obj.close();
            con.close();
        }catch(Exception e){
```

```

        System.out.println(e);
    }

}
}

```

Output:

```

Name
participant1
Query Executed
Name: participant1 participantId: 8

C:\Users\laksh\OneDrive\Desktop\lakshit\college>

```

Server: 127.0.0.1 » Database: meetingdb » Table: meeting

Actions

	MeetingID	ScheduledTime	ScheduledDate	participantID	NameOfParticipant	participantDateBirth	Email	Mobile
Edit Copy Delete	14	14:10	14-10-2022	1	a	10-9-1998	mail@mail	9898989898
Edit Copy Delete	14	14:10	14-10-2022	2	b	12-01-1989	em@mail	9999999999
Edit Copy Delete	14	14:10	14-10-2022	3	c	05-05-1999	tw@mail	8888888888
Edit Copy Delete	15	20-12-2022	20-12-2022	4	t	12-12-1995	m@mail	9765432180
Edit Copy Delete	18	16:00	15-01-2023	5	nt	04-07-1994	ma@mail	9087654321
Edit Copy Delete	8	participant1	NULL	NULL	NULL	NULL	NULL	NULL

With selected: Edit Copy Delete Export

Results operations

Print Copy to clipboard Export Display chart Create view

Console

Q5. Count the number of people participating in the meeting with ID 1105. Display a message on the console that gives both the "MeetingID" and the number of participants.

```

import java.sql.*;

import java.util.Scanner;

public class App {

    public static void main(String[] args) throws Exception {

        Class.forName("com.mysql.cj.jdbc.Driver");

        Connection conn =
        DriverManager.getConnection("jdbc:mysql://localhost:3306/meetingDB", "root", "");

        Statement statement = conn.createStatement();

        int meetingID = 1105;

```



```
String query = String.format("SELECT NameOfParticipant FROM Meeting WHERE  
meetingID = %d;", meetingID);
```

```
ResultSet resSet = statement.executeQuery(query);
```

```
int count = 0;
```

```
while (resSet.next()){
```

```
    count++;
```

```
}
```

```
System.out.println(String.format("Meeting ID: 1105 || Participants: %d", count));
```

```
}
```

```
}
```

Output:

```
PS C:\projects\java_project_domestic\App\src> javac App.java
PS C:\projects\java_project_domestic\App\src> java App
Meeting ID: 1105 || Participants: 6
```

		MeetingID	ScheduledTime	ScheduledDate	participantID	NameOfParticipant	participantDateBirth	Email
<input type="checkbox"/>	Edit Copy Delete	1105	10:00	2022-12-04	1	John	1998-10-10	john@gmail
<input type="checkbox"/>	Edit Copy Delete	1105	10:00	2022-12-04	2	Mary	2000-04-20	mary@gmail
<input type="checkbox"/>	Edit Copy Delete	1105	10:00	2022-12-04	3	Alex	1994-04-01	Alex@gmail
<input type="checkbox"/>	Edit Copy Delete	1105	10:00	2022-12-04	4	Anna	2000-08-01	Anna@gmail
<input type="checkbox"/>	Edit Copy Delete	1105	10:00	2022-12-04	5	Harry	1996-02-10	Harry@gmail
<input type="checkbox"/>	Edit Copy Delete	1105	10:00	2022-12-04	6	Kevin	1992-12-12	Kevin@gmail

Q6. Determine the names of all who participate in meetings on Tuesdays. Display the names, preceded by the message, “Participants attending Tuesday meetings”.

Code:

```
import java.sql.*;
```

```
class Sample{
```

```
    public static void main(String[] args) {
```

```
        try{
```

```
            //Connect to database
```

```
            Class.forName("com.mysql.cj.jdbc.Driver");
```

```
            Connection con =
```

```
            DriverManager.getConnection("jdbc:mysql://localhost:3306/meetingdb", "root", "");
```

```
            Statement stmt = con.createStatement();
```

```

String query = "Select NameOfParticipant from meeting WHERE
WEEKDAY(ScheduledDate) = 1";
ResultSet rs = stmt.executeQuery(query);
System.out.print("Participants attending Tuesday's meeting ");
while(rs.next()){
    System.out.print(rs.getString(1)+" , ");
}
con.close();
}catch(Exception e){
    System.out.println(e);
}

}
}

```

Output:

```

C:\Users\laksh\OneDrive\Desktop\lakshit\college>javac Sample.java

C:\Users\laksh\OneDrive\Desktop\lakshit\college>java Sample
Participants attending Tuesday's meeting ParticipantA, ParticipantC, ParticipantE,
C:\Users\laksh\OneDrive\Desktop\lakshit\college>

```

phpMyAdmin

Server: 127.0.0.1 » Database: meetingdb » Table: meeting

BrowseStructureSQLSearchInsertExportImportPrivilegesOperationsTracking

RecentFavorites

New

information_schema

meetingdb

Procedures

Tables

New

meeting

mysql

performance_schema

phpmyadmin

test

Showing rows 0 - 4 (5 total, Query took 0.0003 seconds.)

FROM `meeting`

Filtering [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Actions

		MeetingID	ScheduledTime	ScheduledDate	participantID	NameOfParticipant	participantDateBirth	Email	Mobile
Edit	Copy	Delete	10	2022-12-04	2022-12-06	9 ParticipantA	2012-02-08	mail@mail	9890102309
Edit	Copy	Delete	10	2022-12-06	2022-12-06	10 ParticipantC	1996-02-08	ABC@mail	9891202345
Edit	Copy	Delete	14	2022-12-11	2022-12-21	11 ParticipantB	1995-12-09	ko@mail	9654321908
Edit	Copy	Delete	20	2022-12-02	2022-12-16	12 ParticipantD	1996-12-30	hyt@mail	9818987609
Edit	Copy	Delete	34	2022-12-20	2022-12-20	13 ParticipantE	1996-12-14	po@mail	9812345670

☐ Check all

With selected:

Edit

Copy

Delete

Export

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Console

Q7. Create a function to get the "participantDateBirth", find the participant's age, and print it.

Code:

```
import java.sql.*;
```

```

public class App {
    public static void main(String[] args) throws Exception {

        Class.forName("com.mysql.cj.jdbc.Driver");

        Connection conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/meetingDB",
"root", "");

        Statement statement = conn.createStatement();

        String query = "SELECT NameOfParticipant FROM Meeting WHERE
WEEKDAY(ScheduledDate) = 1;";



















        ResultSet resSet = statement.executeQuery(query);

        boolean remaining = resSet.next();

        if (!remaining){
            System.out.println("No participants attending Tuesday meeting");
        }
        else {
            System.out.println("Participants attending Tuesday Meeting: ");
            while (remaining){
                System.out.println(resSet.getString("NameOfParticipant"));
                remaining = resSet.next();
            }
        }
    }
}

```

Output:

<div><div>←T→</div><div></div></div>				MeetingID	ScheduledTime	ScheduledDate	participantID	NameOfParticipant	participantDateBirth	Email
<input type="checkbox"/>	 Edit	 Copy	 Delete	1105	10:00	2022-12-06	1	John	1998-10-10	john@gmai
<input type="checkbox"/>	 Edit	 Copy	 Delete	1105	10:00	2022-12-06	2	Mary	2000-04-20	mary@gma
<input type="checkbox"/>	 Edit	 Copy	 Delete	1105	10:00	2022-12-06	3	Alex	1994-04-01	Alex@gmai
<input type="checkbox"/>	 Edit	 Copy	 Delete	1105	10:00	2022-12-06	4	Anna	2000-08-01	Anna@gme
<input type="checkbox"/>	 Edit	 Copy	 Delete	1105	10:00	2022-12-06	5	Harry	1996-02-10	Harry@gma
<input type="checkbox"/>	 Edit	 Copy	 Delete	1105	10:00	2022-12-06	6	Kevin	1992-12-12	Kevin@gma