

CODTECH Internship

TASK 4

Database Backup And Recovery

NAME: S.Arun Ganesh

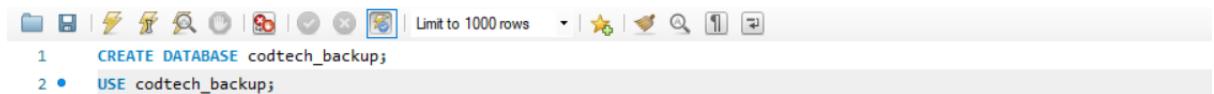
OBJECTIVE:

Take a backup of mysql database and restore without any missing of data.

TOOL USED:

- . MYSQL Server 8.0
- . MYSQL Workbench
- . Command prompt

1.Create database:



A screenshot of the MySQL Workbench interface. The toolbar at the top includes icons for file operations, search, and connection management. A status bar at the bottom indicates "Limit to 1000 rows". The main area contains two lines of SQL code:

```
1 CREATE DATABASE codtech_backup;
2 • USE codtech_backup;
```

2.Create table :

The screenshot shows the MySQL Workbench interface. In the top-left pane, there is a code editor with the following SQL script:

```
1
2
3 • CREATE TABLE employees (
4     emp_id INT PRIMARY KEY,
5     emp_name VARCHAR(50),
6     salary INT
7 );
8
9
```

In the top-right pane, a message states: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

Below the code editor is the "Output" tab, which displays the execution log:

#	Time	Action	Message	Duration / Fetch
1	13:04:08	CREATE DATABASE codetech_backup	1 row(s) affected	0.015 sec
2	13:04:08	USE codetech_backup	0 row(s) affected	0.000 sec
3	13:05:29	CREATE DATABASE codetech_backup	Error Code: 1007. Can't create database 'codetech_backup'; database exists	0.000 sec
4	13:05:42	CREATE TABLE employees (emp_id INT PRIMARY KEY, emp_name VARCHAR(50), salary INT)	0 row(s) affected	0.047 sec

3. Insert values:

The screenshot shows the MySQL Workbench interface. In the top-left window, there is a SQL editor with the following code:

```
1 • INSERT INTO employees VALUES
2   (1,'Arun',50000),
3   (2,'Priya',45000);
```

In the top-right window, a message states: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

Below these windows, the "Output" pane displays the execution log:

#	Time	Action	Message	Duration / Fetch
1	13:04:08	CREATE DATABASE codetech_backup	1 row(s) affected	0.015 sec
2	13:04:08	USE codetech_backup	0 row(s) affected	0.000 sec
3	13:05:29	CREATE DATABASE codetech_backup	Error Code: 1007. Can't create database 'codetech_backup'; database exists	0.000 sec
4	13:05:42	CREATE TABLE employees (emp_id INT PRIMARY KEY, emp_name VARCHAR(50), salary INT)	0 row(s) affected	0.047 sec
5	13:06:21	INSERT INTO employees VALUES (1,'Arun',50000), (2,'Priya',45000)	2 row(s) affected Records: 2 Duplicates: 0 Warnings: 0	0.015 sec

4. Backup process using command prompt:

```
Command Prompt + ▾
Microsoft Windows [Version 10.0.26100.4946]
(c) Microsoft Corporation. All rights reserved.

C:\Users\G.S.A>cd "C:\Program Files\MySQL\MySQL Server 8.0\bin"

C:\Program Files\MySQL\MySQL Server 8.0\bin>
```

```
C:\Program Files\MySQL\MySQL Server 8.0\bin>mysqldump -u root -p codtech_backup > "C:\Users\G.S.A\Documents\codtech_backup.sql"
Enter password: *****
```

Documents					
Start backup > Documents >					
		Name	Date modified	Type	Size
+	New	Gallery			
>	x	Custom Office Templates	17-01-2026 16:46	File folder	
		dumps	19-01-2026 12:38	File folder	
		CODTECH Internship	19-01-2026 12:58	Microsoft Word D...	448 KB
		codtech_backup	19-01-2026 13:27	SQL Text File	2 KB
		migration	19-01-2026 12:49	SQL Text File	1 KB

Backup created successfully

5.Opening backup file:

```
codtech_backup x
Limit to 1000 rows
1 -- MySQL dump 10.13 Distrib 8.0.44, for Win64 (x86_64)
2 --
3 -- Host: localhost      Database: codtech_backup
4 --
5 -- Server version 8.0.44
6
7 • /*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
8 • /*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
9 • /*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
10 • /*!50503 SET NAMES utf8mb4 */;
11 • /*!40103 SET @OLD_TIME_ZONE=@@TIME_ZONE */;
12 • /*!40103 SET TIME_ZONE='+00:00' */;
13 • /*!40014 SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0 */;
14 • /*!40014 SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0 */;
15 • /*!40101 SET @OLD_SQL_MODE=@@SQL_MODE, SQL_MODE='NO_AUTO_VALUE_ON_ZERO' */;
16 • /*!40111 SET @OLD_SQL_NOTES=@@SQL_NOTES, SQL_NOTES=0 */;
17
18 --
19 -- Table structure for table `employees`
20 --
21
22 • DROP TABLE IF EXISTS `employees`;
23 • /*!40101 SET @saved_cs_client      = @@character_set_client */;
24 • /*!50503 SET character_set_client = utf8mb4 */;
25 • CREATE TABLE `employees` (
```

In MySQL

migration.sql codtech_backup.sql

File Edit View

```
-- MySQL dump 10.13 Distrib 8.0.44, for Win64 (x86_64)
-- 
-- Host: localhost      Database: codtech_backup
-- 
-- Server version     8.0.44

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!50503 SET NAMES utf8mb4 */;
/*!40103 SET @OLD_TIME_ZONE=@TIME_ZONE */;
/*!40103 SET TIME_ZONE='+00:00' */;
/*!40014 SET @OLD_UNIQUE_CHECKS=@UNIQUE_CHECKS, UNIQUE_CHECKS=0 */;
/*!40014 SET @OLD_FOREIGN_KEY_CHECKS=@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0 */;
/*!40101 SET @OLD_SQL_MODE=@SQL_MODE, SQL_MODE='NO_AUTO_VALUE_ON_ZERO' */;
/*!40111 SET @OLD_SQL_NOTES=@SQL_NOTES, SQL_NOTES=0 */;

-- 
-- Table structure for table `employees`


DROP TABLE IF EXISTS `employees`;
/*!40101 SET @saved_cs_client      = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `employees` (
  `emp_id` int NOT NULL,
  `emp_name` varchar(50) DEFAULT NULL,
  `salary` int DEFAULT NULL,
  PRIMARY KEY (`emp_id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;

-- 
-- Dumping data for table `employees`


LOCK TABLES `employees` WRITE;
/*!40000 ALTER TABLE `employees` DISABLE KEYS */;
INSERT INTO `employees` VALUES (1,'Arun',50000),(2,'Priya',45000);
/*!40000 ALTER TABLE `employees` ENABLE KEYS */;
UNLOCK TABLES;
/*!40103 SET TIME_ZONE=@OLD_TIME_ZONE */;

/*!40101 SET SQL_MODE=@OLD_SQL_MODE */;
/*!40014 SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS */;
/*!40101 SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS */;

/*!40101 SET SQL_MODE=@OLD_SQL_MODE */;
/*!40014 SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS */;
/*!40014 SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS */;
/*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;
/*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;
/*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;
/*!40111 SET SQL_NOTES=@OLD_SQL_NOTES */;

-- Dump completed on 2026-01-19 13:39:58
```

Ln 11, Col 44 | 1,980 characters | Plain text

In Notepad

6.Dropping the table:

Query 1

1 • DROP TABLE employees

Output		
Action Output		
#	Time	Action
1	13:32:12	DROP TABLE employees

1 SELECT * FROM employees

SQLAdditions

< > | | Jump to

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Output		
Action Output		
#	Time	Action
1	13:32:12	DROP TABLE employees
2	13:33:16	SELECT * FROM employees LIMIT 0, 1000

Context Help Snippets

Message Duration / Fetch
0 row(s) affected 0.016 sec

Error Code: 1146. Table 'codtech_task1.employees' doesn't exist 0.000 sec

7.Recovery process:

The screenshot shows the SQL Server Management Studio interface. In the Query Editor window, the command `CREATE DATABASE codtech_restore` is entered. The Output pane displays the results of the execution, showing a single row affected with a duration of 0.000 sec.

```
Query 1 SQL File 3* ×
CREATE DATABASE codtech_restore

Output
Action Output
# Time Action Message Duration / Fetch
1 13:49:22 CREATE DATABASE codtech_restore 1 row(s) affected 0.000 sec

SQLAdditions: <|> | Jump to
Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Context Help Snippets
```

The screenshot shows the SQL Server Management Studio interface. In the Query Editor window, the commands `USE codtech_restore;` and `SHOW TABLES;` are entered. The Results pane shows a grid of tables in the database, including `employees`. The Output pane shows the execution details for both commands.

```
Query 1 SQL File 3* ×
1 USE codtech_restore;
2 SHOW TABLES;

Result Grid | Filter Rows: Export: Wrap Cell Content: ⓘ
Tables_in_codtech_restore
employees

Output
Action Output
# Time Action Message Duration / Fetch
1 13:49:22 CREATE DATABASE codtech_restore 1 row(s) affected 0.000 sec
2 13:51:48 USE codtech_restore 0 row(s) affected 0.000 sec
3 13:51:48 SHOW TABLES 1 row(s) returned 0.000 sec / 0.000 sec

SQLAdditions: <|> | Jump to
Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Context Help Snippets
```

The screenshot shows the MySQL Workbench interface. At the top, there is a toolbar with various icons. Below the toolbar, a query editor window titled "Query 1" contains the SQL command: "SELECT * FROM employees;". To the right of the query editor is a vertical panel titled "SQLAdditions" which displays the message: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help." Below the query editor is a "Result Grid" window showing the results of the query:

emp_id	emp_name	salary
1	Arun	50000
2	Priya	45000

At the bottom of the interface, there is a "employees 2" window titled "Action Output" which lists the following log entries:

#	Time	Action	Message	Duration / Fetch
1	13:49:22	CREATE DATABASE codetech_restore	1 row(s) affected	0.000 sec
2	13:51:48	USE codetech_restore	0 row(s) affected	0.000 sec
3	13:51:48	SHOW TABLES	1 row(s) returned	0.000 sec / 0.000 sec
4	13:52:36	SELECT * FROM your_table_name LIMIT 0, 1000	Error Code: 1146. Table 'codetech_restore.your_table_name' doesn't exist	0.000 sec
5	13:53:01	SELECT * FROM employees LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec

Conclusion:

Database backup and recovery ensures data safety and business continuity during system failures.