Major Project Report
on
Structured Data Prognosis With SQL

Submitted in Partial fulfillment for the award of degree of Bachelor of Engineering in Computer Science and Engineering

Submitted to

Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal (M.P.)

Submitted By:

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Approved by AICTE New Delhi & Govt. of M.P.

Affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal (M.P.)

Session: 2023-24

JAI NARAIN COLLEGE OF TECHNOLOGY,BHOPAL

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

CERTIFICATE

This is to certify that the work embodied in this Project, Dissertation Report entitled as **" Structured Data Prognosis With SQL "** being Submitted by **Laxman Kalam (0131CS201059)** in partial fulfillment of the requirement for the award of **"Bachelor of Engineering" in Computer Science & Engineering** discipline to Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal (M.P.) during the academic year 2023-24 is a record of bonafide piece of work, carried out under my supervision and guidance in the Department of Computer Science & Engineering, **Jai Narain College of Technology,Bhopal.**

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Approved by

Guide

Head of Department

Principal

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

CERTIFICATE OF APPROVAL

This Project **"Structurd Data Prognosis With SQL"** being submitted by **Laxman Kalam (0131CS201059)** has been examined by me & hereby approve for the partial fulfillment of the requirement for the award of **"Bachelor of Engineering in Computer Science & Engineering",** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expresses or conclusion draw there in, but the Project only for the purpose for which it has been submitted.

INTERNAL EXAMINER

Date:

EXTERNAL EXAMINER

Date:

CANDIDATE DECLARATION

We hereby declare that the Project dissertation work presented in the report entitled as **"Structured Data Prognosis with SQL"** submitted in the partial fulfillment of the requirements for the award of the degree of Bachelor of Engineering in Computer Science & Engineering of **Jai Narain College of Technology,Bhopal** is an authentic record of our own work.

We have not submitted the part and partial of this report for the award of any other degree or diploma.

Laxman Kalam (0131CS201059)

Date:

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Guide

ACKNOWLEDGMENT

We are heartily thankful to the **Jai Narain College Of Technoloy** for providing us all the facilities and infrastructure to take our work to the final stage.

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We express deep sense of gratitude and respect to our learned guide **Menali Paul,** Professor in the Department of Computer Science & Engineering, during all phases of our work. Without his enthusiasm and encouragement this dissertation would not have been completed. His valuable knowledge and innovative ideas helped us to take the work to the final stage. He has timely suggested actions and procedures to follow for which we are really grateful and thankful to him.

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We really admire the fond support of our class-mates for their co-operation and constant help. It gives immense pleasure to acknowledge the encouragement and support extended by them.

Last but not the least we are extremely thankful to all who have directly or indirectly helped us for the completion of the work.

Laxman Kalam (0131CS201059)

Abstract

Structured data prognosis with SQL is a powerful tool for data analysis, allowing users to quickly and efficiently extract meaningful insights from large datasets.

It can be used to identify trends, uncover correlations, and generate predictions. SQL is an essential skill for data analysts and data scientists, enabling them to quickly and accurately query large databases, manipulate data, and even create predictive models.

With its ability to quickly process large amounts of data, SQL can be used to diagnose complex problems and discover hidden patterns in datasets

This makes it an invaluable tool for data scientists, allowing them to analyze data quickly and efficiently.

Structured data prognosis with SQL is an analytical methodology used to predict future trends and outcomes by using existing structured data, such as databases, spreadsheets, and data warehouses.

It utilizes SQL queries to generate predictive models and insights based on historical or current data.

This method of data analysis can be used to identify future trends in customer behaviour, sales, and product performance.

The insights gained can be used to inform decision making and drive business strategies.

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1.Introduction

Structured data prognosis with SQL is the process of using Structured Query Language (SQL) to make predictions about a dataset.

This can be done by using specialized techniques such as predictive analytics and machine learning algorithms.

By using SQL to analyze large datasets, it is possible to identify patterns and correlations which can be used to make predictions about future events or outcomes.

SQL-based predictive analytics can be used to make predictions in a wide range of areas such as finance, marketing, healthcare, and security.

In addition to making predictions, SQL can also be used to optimize processes and systems by identifying the most efficient and cost-effective solutions.

2.1 Purpose

Structured data prognosis with SQL is used to make predictions and insights from data stored in a relational database.

By using SQL queries, data analysts can identify trends, patterns, and correlations in the data, enabling them to identify opportunities or threats and make decisions based on the data.

This can be used for a variety of purposes, such as predicting customer behavior, forecasting sales, and optimizing marketing campaigns.

2.2 Scope

Structured data prognosis with SQL is the process of predicting outcomes from data stored in a relational database.

It uses the powerful query language SQL to obtain useful insights from data stored in the database.

SQL-based data prognosis can be used for a wide range of tasks, such as predicting customer behavior, forecasting future trends, identifying opportunities for business growth, and making decisions about resource allocation. Additionally, SQL can be used to analyze large datasets quickly and efficiently, allowing businesses to make informed decisions quickly.

3.1 Software Requirement

MySQL is a popular open source relational database management system that is used to store and manage large amounts of data.

It is commonly used in web applications, and is one of the most popular database management systems in use today.

MySQL can be used for a variety of purposes, including data warehousing, e-commerce, logging applications, and much more.

MySQL is also very easy to install and use, and its powerful features make it a great choice for many applications.

3.2 Data Requirement

The data requirement for an SQL query depends on the type of query being written.

A basic SELECT statement requires at least one table of data to be specified so that the query can be executed.

More complex queries may require additional data or parameters to be specified, such as a WHERE clause or ORDER BY clause.

The exact data requirement for an SQL query will depend on the specific query being written.

4.1 Use Case Diagram

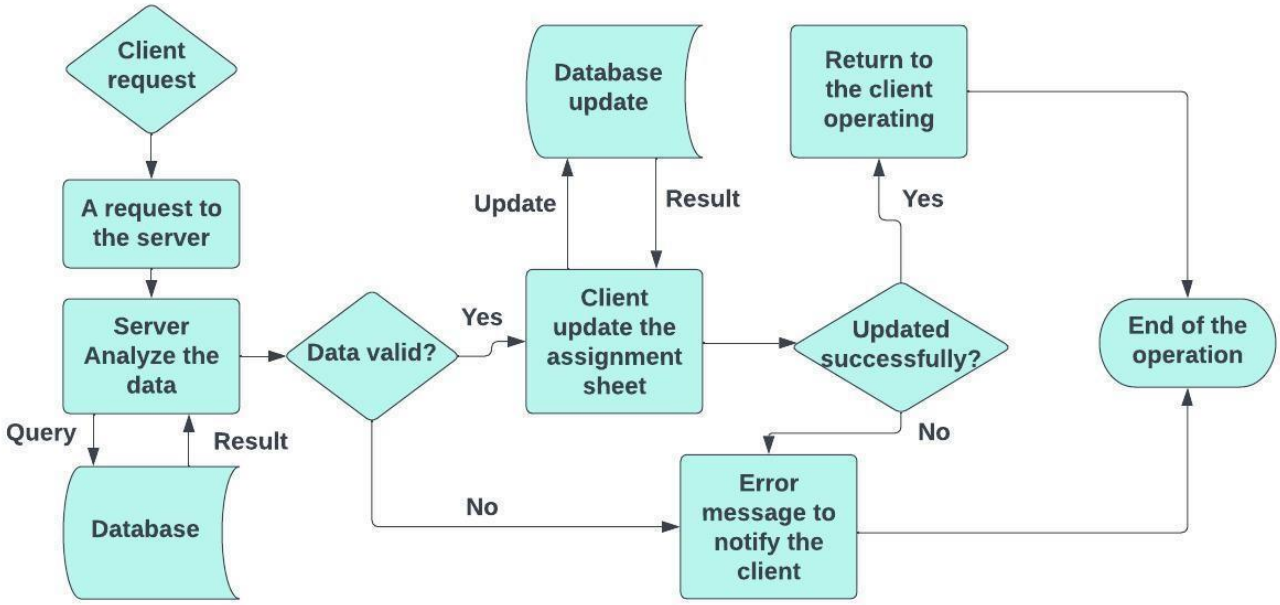
1. Online Shopping Analysis: Structured data prognosis with SQL can be used to analyze online shopping trends, such as which products are selling the best and which customers are the most frequent shoppers. This information can help retailers optimize their inventory and marketing strategies in order to increase sales.

2. Customer Segmentation: Structured data prognosis with SQL can be used to segment customers into different categories based on their behavior. This can help companies target specific customer groups with personalized marketing campaigns.

3. Business Intelligence: SQL can be used to analyze a company's performance over time. This data can be used to identify areas of improvement, as well as to track progress towards business goals.

4. Predictive Analytics: Structured data prognosis with SQL can be used to build predictive models that can help companies anticipate future customer needs and trends. This can help companies stay ahead of their competition and better serve their customers.

4.2 DFD

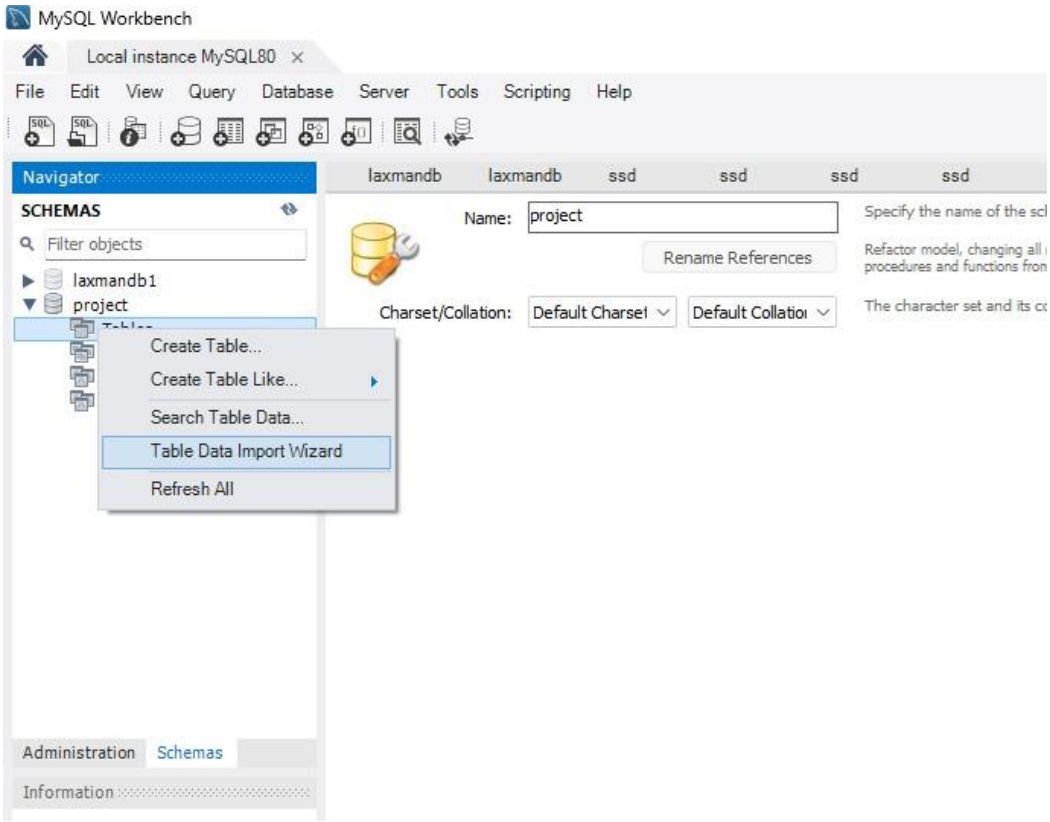


5. TESTING

Create database----FIRST;

1. CREATE SCHEMA `project`;

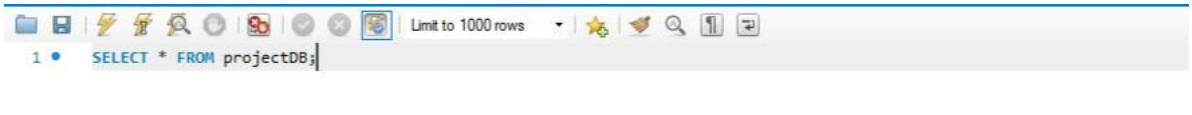
2. Import Data

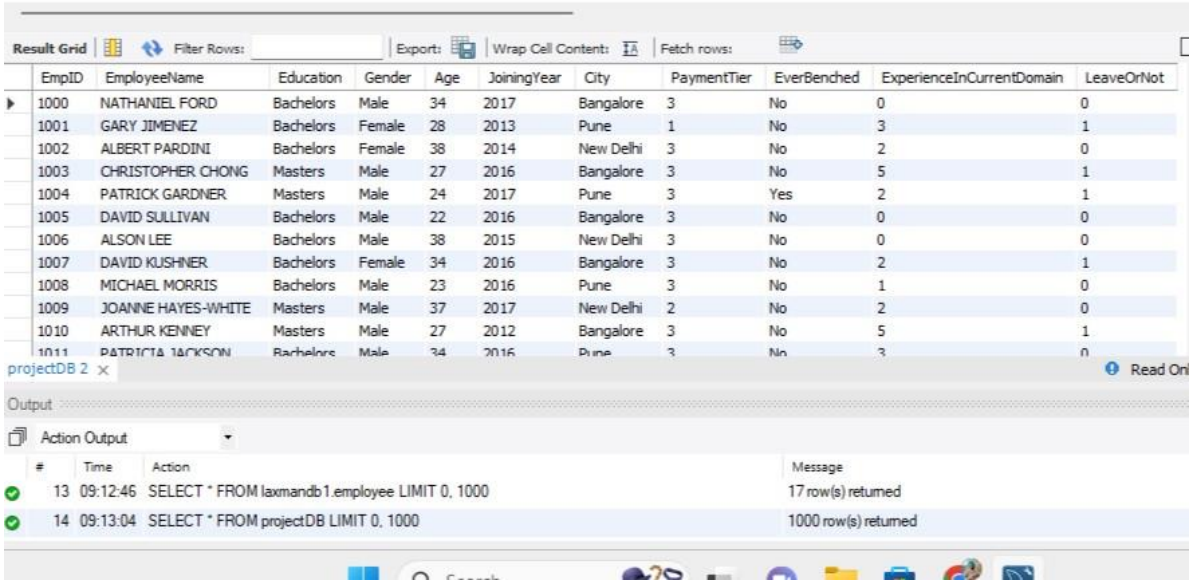


*Select File Path

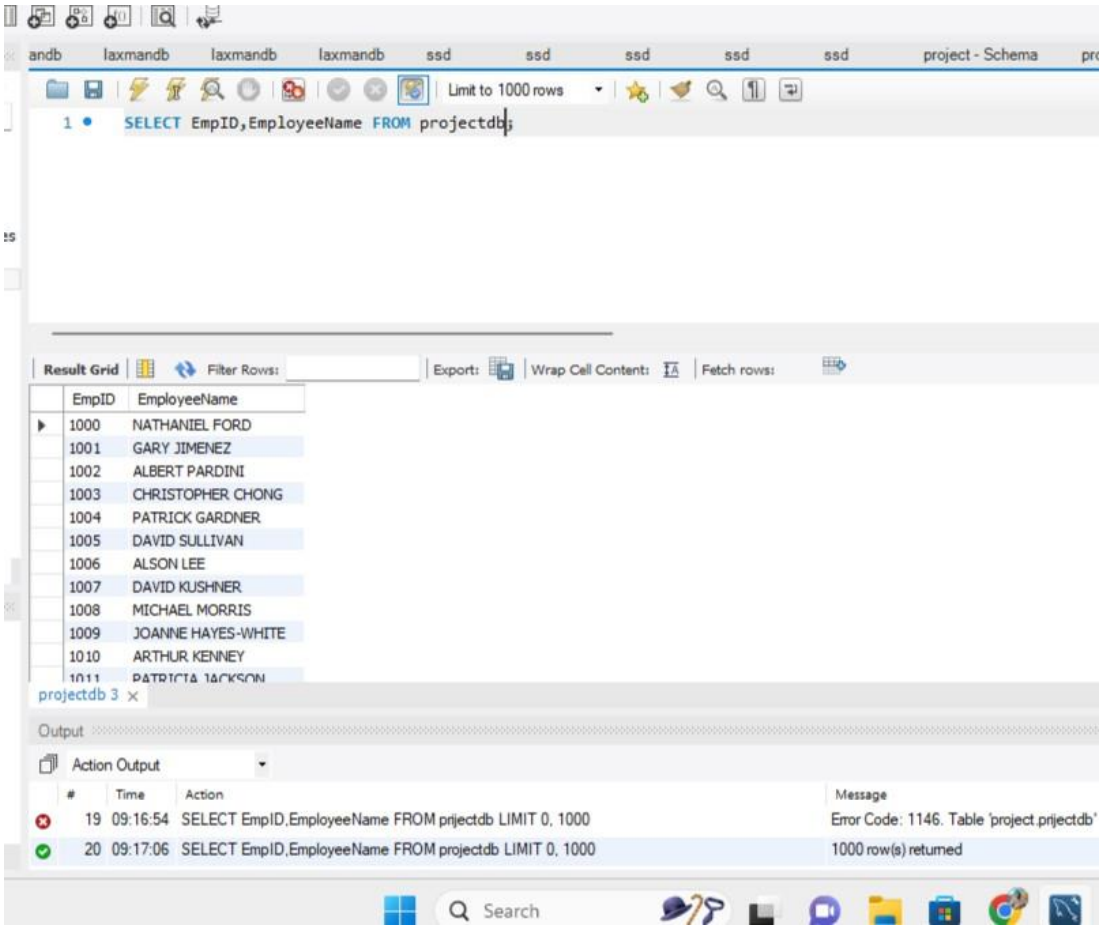
3. write some Query For Testing

(1.) SELECT * FROM projectdb;

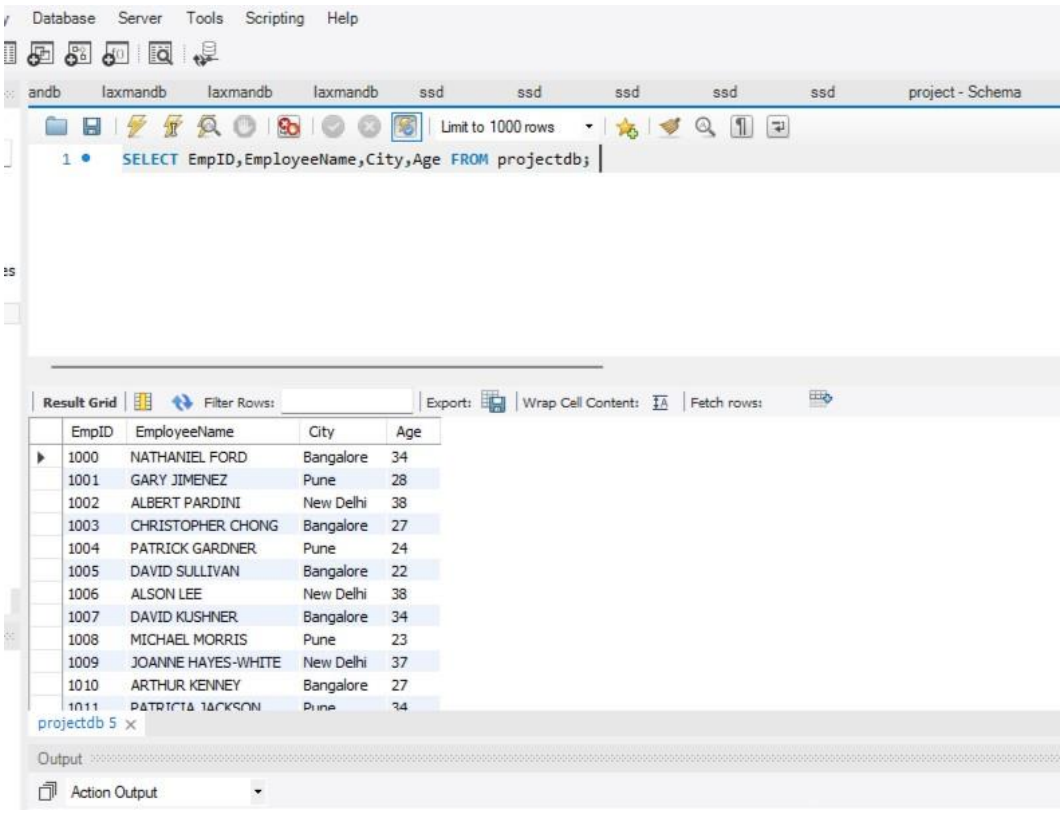




(2.) SELECT EmpID,EmployeeName FROM projectdb;

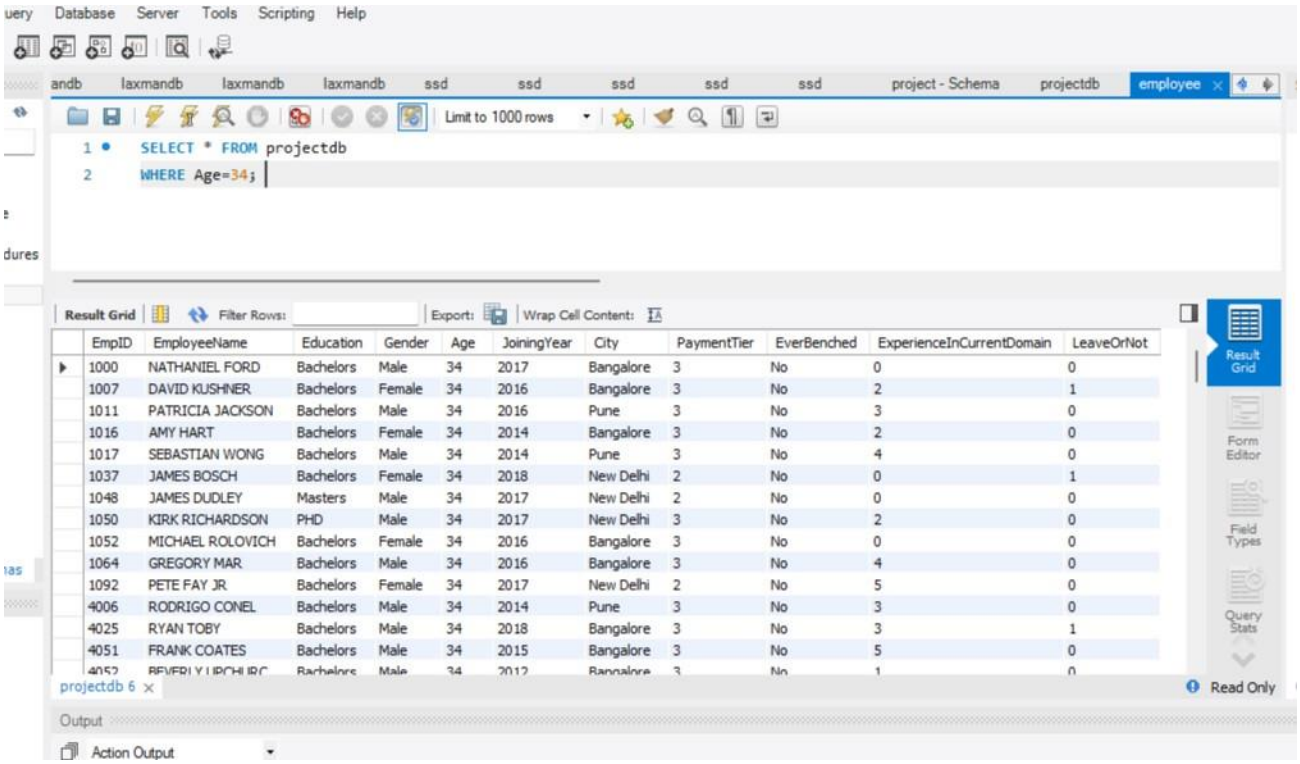


(3.) SELECT EmpID,EmployeeName,City,Age FROM projectdb;



(4.) SELECT * FROM projectdb

WHERE Age=34;



```
SELECT * FROM projectdb
WHERE Age=34;
```

EmpID	EmployeeName	Education	Gender	Age	JoiningYear	City	PaymentTier	EverBenched	ExperienceInCurrentDomain	LeaveOrNot
1000	NATHANIEL FORD	Bachelors	Male	34	2017	Bangalore	3	No	0	0
1007	DAVID KUSHNER	Bachelors	Female	34	2016	Bangalore	3	No	2	1
1011	PATRICIA JACKSON	Bachelors	Male	34	2016	Pune	3	No	3	0
1016	AMY HART	Bachelors	Female	34	2014	Bangalore	3	No	2	0
1017	SEBASTIAN WONG	Bachelors	Male	34	2014	Pune	3	No	4	0
1037	JAMES BOSCH	Bachelors	Female	34	2018	New Delhi	2	No	0	1
1048	JAMES DUDLEY	Masters	Male	34	2017	New Delhi	2	No	0	0
1050	KIRK RICHARDSON	PHD	Male	34	2017	New Delhi	3	No	2	0
1052	MICHAEL ROLOVICH	Bachelors	Female	34	2016	Bangalore	3	No	0	0
1064	GREGORY MAR	Bachelors	Male	34	2016	Bangalore	3	No	4	0
1092	PETE FAY JR	Bachelors	Female	34	2017	New Delhi	2	No	5	0
4006	RODRIGO CONEL	Bachelors	Male	34	2014	Pune	3	No	3	0
4025	RYAN TOBY	Bachelors	Male	34	2018	Bangalore	3	No	3	1
4051	FRANK COATES	Bachelors	Male	34	2015	Bangalore	3	No	5	0

6. Limitations

1. SQL is limited in its ability to deal with unstructured data, such as text, images, and audio.

2. SQL is limited in its ability to perform complex calculations and operations.

3. SQL is limited in its ability to handle large datasets in an efficient manner.

4. SQL is limited in its ability to handle data from multiple sources or formats.

5. SQL is limited in its ability to effectively visualize data.

6. SQL is limited in its ability to integrate with machine learning algorithms.