

Insurance Database

SQL Final Project by Dipak Hire

1. Description:

Following database schema is designed to function as backend storage database for a web application built to manage insurance Database.

By storing information in a relational database, Course project for Database Management System which is a project that manages insurance database. All the tasks related to store functioning of the insurance can be performed easily and much more efficiently. Some of the benefits of using this system to store data over traditional paper registers are as follows:

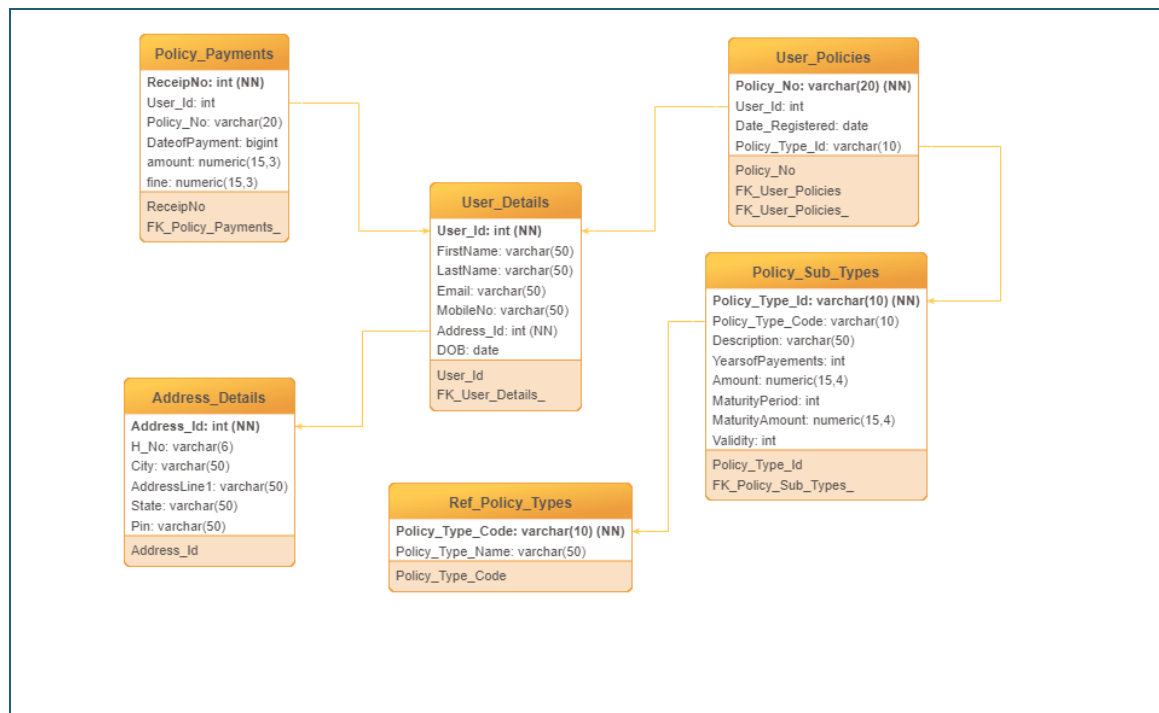
- Updating and modifying insurance details is much easier and efficient.
- Maintaining customer personal details and their account is easy and efficient.
- We manage purchased detail, customer detail info and maturity status can be done automatically by DBMS, thus eliminating human error.
- RDBMS provides many ways to analyse available data, thus helping in making more informed decisions about insurance management.

This database contains Tables:

1. Address_Details.
2. User_Details
3. Ref_Policy_Types
4. Policy_Sub_Types
5. User_Policies
6. Policy_Payments

How these tables/entities are related to each other is shown pictorially on next page through ER diagram, i.e., Entity Relationship Diagram.

ER diagram



3. Table Description

1. Address_Details

Insurance project.sql - DipYog.Insurance (DIPYOG\dipak (59)) - Microsoft SQL Server Management Studio

Quick Launch (Ctrl+Q)

Object Explorer

Connect -> DipYog (SQL Server 15.0.2000.5 - DIPYOG)

Insurance project.sql - DipYog.Insurance (DIPYOG\dipak (59))

Exec sp_help[Address_Details];

Results

Column_name	Type	Computed	Length	Prec	Scale	Nullable	TrimTrailingBlanks	FixedLenNullInSource	Collation
Address_Id	int	no	4	10	0	no	(n/a)	(n/a)	NULL
H_No	varchar	no	6			yes	no	yes	SQL_Latin1_General_CP1_CI_AS
City	varchar	no	50			yes	no	yes	SQL_Latin1_General_CP1_CI_AS
AddressLine1	varchar	no	50			yes	no	yes	SQL_Latin1_General_CP1_CI_AS
State	varchar	no	50			yes	no	yes	SQL_Latin1_General_CP1_CI_AS
Pin	varchar	no	50			yes	no	yes	SQL_Latin1_General_CP1_CI_AS

Identity

Identity	Seed	Increment	Not For Replication
1	NULL	NULL	NULL

RowGuidCol

RowGuidCol
1

Data Located on Filegroup

Data Located on Filegroup
1

Index

index_name	index_description	index_keys
PK_Address_038DEBBAFAB72050	clustered, unique, primary key located on PRIMARY	Address_Id

Constraint

constraint_type	constraint_name	delete_action	update_action	status_enabled	status_for_replication	constraint_keys
PRIMARY KEY (clustered)	PK_Address_038DEBBAFAB72050	(n/a)	(n/a)	(n/a)	(n/a)	Address_Id

Table is referenced by foreign key

Table is referenced by foreign key
1

Query executed successfully.

DipYog (15.0 RTM) | DIPYOG\dipak (59) | Insurance | 00:00:36 | 1 rows

2. User_Details

The screenshot displays the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure, with the 'User_Details' table selected under the 'Insurance' database. The main pane shows the results of the query 'EXEC sp_help(User_Details)'. The results are displayed in a table format, showing the table's metadata, including columns, data types, lengths, and constraints.

Name	Owner	Type	Created_datetime
User_Details	dbo	user table	2023-01-10 09:26:11.757

Column_name	Type	Computed	Length	Prec	Scale	Nullable	TrimTrailingBlanks	FixedLenNullInSource	Collation
User_Id	int	no	4	10	0	no	(n/a)	(n/a)	NULL
FirstName	varchar	no	50			yes	no	yes	SQL_Latin1_General_CP1_CI_AS
LastName	varchar	no	50			yes	no	yes	SQL_Latin1_General_CP1_CI_AS
Email	varchar	no	50			yes	no	yes	SQL_Latin1_General_CP1_CI_AS
MobileNo	varchar	no	50			yes	no	yes	SQL_Latin1_General_CP1_CI_AS
Address_Id	int	no	4	10	0	yes	(n/a)	(n/a)	NULL
DOB	date	no	3	10	0	yes	(n/a)	(n/a)	NULL

Identity	Seed	Increment	Not For Replication
No identity column defined.	NULL	NULL	NULL

RowGuidCol
No rowguidcol column defined.

Data_located_on_filegroup
PRIMARY

index_name	index_description	index_keys
PK_User_Details	clustered, unique, primary key located on PRIMARY	User_Id

constraint_type	constraint_name	delete_action	update_action	status_enabled	status_for_replication	constraint_keys
FOREIGN KEY	FK_User_Details_Address	No Action	No Action	Enabled	Is_For_Replication	Address_Id
PRIMARY KEY	PK_User_Details	(n/a)	(n/a)	(n/a)	(n/a)	User_Id

Table is referenced by foreign key

Insurance.dbo.Policy_Payments: FK_Policy_Payments_User_Id

Query executed successfully.

3. Ref_Policy_Types

The screenshot displays the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure, with the 'Ref_Policy_Types' table selected under the 'Insurance' database. The main pane shows the results of the query 'EXEC sp_help(Ref_Policy_Types)'. The results are displayed in a table format, showing the table's metadata, including columns, data types, lengths, and constraints.

Name	Owner	Type	Created_datetime
Ref_Policy_Types	dbo	user table	2023-01-10 09:29:05.363

Column_name	Type	Computed	Length	Prec	Scale	Nullable	TrimTrailingBlanks	FixedLenNullInSource	Collation
Policy_Type_Code	varchar	no	10			no	no	no	SQL_Latin1_General_CP1_CI_AS
Policy_Type_name	varchar	no	50			yes	no	yes	SQL_Latin1_General_CP1_CI_AS

Identity	Seed	Increment	Not For Replication
No identity column defined.	NULL	NULL	NULL

RowGuidCol
No rowguidcol column defined.

Data_located_on_filegroup
PRIMARY

index_name	index_description	index_keys
PK_Ref_Policy_Types	clustered, unique, primary key located on PRIMARY	Policy_Type_Code

constraint_type	constraint_name	delete_action	update_action	status_enabled	status_for_replication	constraint_keys
PRIMARY KEY (clustered)	PK_Ref_Policy_Types	(n/a)	(n/a)	(n/a)	(n/a)	Policy_Type_Code

Table is referenced by foreign key

Insurance.dbo.Policy_Sub_Types: FK_Policy_Sub_Types_Ref_Policy_Type_Code

Query executed successfully.

4. Policy_Sub_Types

The screenshot displays the 'Policy_Sub_Types' table structure in Microsoft SQL Server Management Studio. The table has the following columns:

Column_name	Type	Computed	Length	Prec	Scale	Nullable	TrimTrailingBlanks	FixedLenNullInSource	Collation
Policy_Type_Id	varchar	no	10			no	no	no	SQL_Latin1_General_CP1_CI_AS
Policy_Type_Code	varchar	no	10			yes	no	yes	SQL_Latin1_General_CP1_CI_AS
Description	varchar	no	50			yes	no	yes	SQL_Latin1_General_CP1_CI_AS
YearsOfPayments	int	no	4	10	0	yes	(n/a)	(n/a)	NULL
amount	numeric	no	9	18	0	yes	(n/a)	(n/a)	NULL
MaturityPeriod	int	no	4	10	0	yes	(n/a)	(n/a)	NULL
MaturityAmount	numeric	no	9	18	0	yes	(n/a)	(n/a)	NULL
Validity	int	no	4	10	0	yes	(n/a)	(n/a)	NULL

The table is referenced by a foreign key constraint named 'FK_Policy_Sub_Types_Policy_Type_Id' which points to the 'Policy_Type_Id' column in the 'Policy_Type' table. The primary key is 'Policy_Type_Id'.

5. User_Policies

The screenshot displays the 'User_Policies' table structure in Microsoft SQL Server Management Studio. The table has the following columns:

Column_name	Type	Computed	Length	Prec	Scale	Nullable	TrimTrailingBlanks	FixedLenNullInSource	Collation
Policy_No	varchar	no	20			no	no	no	SQL_Latin1_General_CP1_CI_AS
User_Id	int	no	4	10	0	yes	(n/a)	(n/a)	NULL
Date_Registered	date	no	3	10	0	yes	(n/a)	(n/a)	NULL
Policy_Type_Id	varchar	no	10			yes	no	yes	SQL_Latin1_General_CP1_CI_AS

The table is referenced by a foreign key constraint named 'FK_User_Policies_Policy_No' which points to the 'Policy_No' column in the 'Policy' table. The primary key is 'Policy_No'.

6. Policy_Payments

Insurance project.sql - DipVog\Insurance (DIPVOG\dipak (59)) - Microsoft SQL Server Management Studio

Object Explorer: Insurance project.sql - DipVog\Insurance (DIPVOG\dipak (59))

Results: Messages

Name	Owner	Type	Created_datetime
Policy_Payments	dbo	user table	2023-01-10 09:40:04.563

Column_name	Type	Computed	Length	Prec	Scale	Nullable	TrimTrailingBlanks	FixedLenNullInSource	Collation
1 ReceiptNo	int	no	4	10	0	no	(n/a)	(n/a)	NULL
2 User_Id	int	no	4	10	0	yes	(n/a)	(n/a)	NULL
3 Policy_No	varchar	no	20			yes	no	yes	SQL_Latin1_General_CP1_CI_AS
4 DateofPayment	date	no	3	10	0	yes	(n/a)	(n/a)	NULL
5 amount	numeric	no	9	18	0	yes	(n/a)	(n/a)	NULL
6 fine	numeric	no	9	18	0	yes	(n/a)	(n/a)	NULL

Identity	Seed	Increment	Not For Replication
1 No identity column defined.	NULL	NULL	NULL

RowGUIDCol
1 No rowguidcol column defined.

Data_located_on_filegroup
1 PRIMARY

index_name	index_description	index_keys
1 PK__Policy_P__BD53F889712F232A	clustered, unique, primary key located on PRIMARY	ReceiptNo

constraint_type	constraint_name	delete_action	update_action	status_enabled	status_for_replication	constraint_keys
1 FOREIGN KEY	FK__Policy_Pa__Polic_32E0915F	No Action	No Action	Enabled	Is_For_Replication	Policy_No REFERENCES Insurance.dbo.User_Policies (Policy_No)
2 FOREIGN KEY	FK__Policy_Pa__User__31EC6...	No Action	No Action	Enabled	Is_For_Replication	User_Id REFERENCES Insurance.dbo.User_Details (User_Id)
4 FOREIGN KEY	FK__Policy_Pa__User__31EC6...	No Action	No Action	Enabled	Is_For_Replication	User_Id REFERENCES Insurance.dbo.User_Details (User_Id)
5 PRIMARY KEY (clustered)	PK__Policy_P__BD53F889712F2...	(n/a)	(n/a)	(n/a)	(n/a)	ReceiptNo

Query executed successfully.

4. Commands

--First, we have to create the database "insurance":

```
CREATE DATABASE Insurance;
```

--After creating the database, then we have to use that database.:

```
USE Insurance;
```

--Creating table Address_Details

```
CREATE TABLE Address_Details
```

```
( Address_Id int primary key,
  H_No varchar(6),
  city varchar(50),
  AddressLine1 varchar(50),
  State varchar(50),
  Pin varchar(50));
```

--Creating table User_Details

```
CREATE TABLE User_Details
```

```
( User_Id int primary key,
  FirstName varchar(50),
  LastName varchar(50),
  Email varchar(50),
  MobileNo varchar(50),
  Address_Id int references Address_Details(Address_Id),
  DOB date);
```

--Creating table Ref_Policy_Types

```
CREATE TABLE Ref_Policy_Types
(
    Policy_Type_Code varchar(10) primary key,
    Policy_Type_name varchar(50)
);
```

--Creating table Policy_Sub_Types

```
CREATE TABLE Policy_Sub_Types
(
    Policy_Type_Id varchar(10) primary key,
    Policy_Type_Code varchar(10) references
    Ref_policy_Types(Policy_Type_Code),
    Description varchar(50),
    YearsofPayements int,
    amount numeric,
    MaturityPeriod int,
    MaturityAmount numeric,
    Validity int
);
```

--Creating table User_Policies

```
CREATE TABLE User_Policies
(
    Policy_No varchar(20) primary key,
    User_Id int references User_Details(User_Id),
    Date_Registered date,
    Policy_Type_Id varchar(10) references
    Policy_Sub_Types(policy_Type_Id)
);
```

--Creating table Policy_Payments

```
CREATE TABLE Policy_Payments
(
    ReceipNo int primary key,
    User_Id int references User_Details(User_Id),
    Policy_No varchar(20) references User_Policies(Policy_No),
    DateofPayment date,
    amount Numeric,
    fine numeric
);
```

--Insert records into the Address_Details table:**INSERT INTO** Address_Details **values**

```
(1, '6-21', 'Hyderabad', 'Salim ki gali', 'Andhra Pradesh', 500003),
(2, '7-81', 'Chennai', 'Serusari', 'Tamilnadu', 600001),
(3, '3-71', 'Lucknow', 'Wajid bhai Road', 'Uttarpradesh', 226001),
(4, '4-81', 'NaviMumbai', 'Airoli', 'Maharashtra', 400708),
(5, '5-81', 'Bangalore', 'MG Road', 'Karnataka', 530068),
(6, '6-81', 'Ahamadabad', 'Street2', 'Gujarat', 320008),
(7, '9-21', 'Nashik', 'Trimurti Chowk', 'Maharashtra', 422009);
```

--Insert records into the User_Details table:**INSERT INTO** User_Details **values**

```
(1111, 'Raju', 'Reddy', 'raju@gmail.com', '9854261456', 5, '1986-04-11'),
(2222, 'Javed', 'Khan', 'javedk@gmail.com', '9854261463', 1, '1990-04-11'),
(3333, 'Naveen', 'Reddy', 'naveen@gmail.com', '9854261496', 2, '1985-03-14'),
(4444, 'Raghav', 'Patil', 'raghavp@gmail.com', '9854261412', 4, '1985-09-21'),
(5555, 'Harsha', 'Pandey', 'harsha@gmail.com', '9854261445', 3, '1992-10-11'),
(6666, 'Amit', 'Shah', 'amits@ymail.com', '9896954523', 6, '1994-12-04');
```

--Insert records into the Ref_Policy_Types table:**INSERT INTO** Ref_Policy_Types **values**

```
('58934', 'Car'),
('58936', 'Bike'),
('58539', 'Home'),
('58969', 'Term'),
('58979', 'Health'),
('58683', 'Life');
```

--Insert records into the Policy_Sub_Types table:**INSERT INTO** Policy_Sub_Types **values**

```
('6893', '58934', 'Theft', 1, 10000, null, 200000, 1),
('6894', '58934', 'Accident', 1, 50000, null, 500000, 3),
('6895', '58539', 'Fire', 1, 50000, null, 500000, 3),
('6896', '58683', 'Anand Life', 7, 50000, 15, 1500000, null),
('6897', '58683', 'Sukh Life', 10, 5000, 13, 300000, null),
('6899', '58936', 'Theft', 1, 5000, null, 50000, 1),
('6898', '58936', 'Accident', 1, 2000, null, 30000, 3),
('6891', '58979', 'Group Health', 1, 50000, null, 2000000, 1),
('6889', '58979', 'Single Health', 1, 11000, null, 500000, 1);
```

delete from Policy_Sub_Types **where** Policy_Type_Id='6889'**insert into** Policy_Sub_Types **values**('6889', '58979', 'Single Health', 1, 11000, null, 500000, 1);

--Insert Records into the User_Policies table:

```
INSERT INTO User_Policies values
('689314',1111,'1994-04-18','6896'),
('689316',1111,'2012-05-18','6895'),
('689317',1111,'2012-06-20','6894'),
('689318',2222,'2012-06-21','6894'),
('689320',3333,'2012-06-18','6894'),
('689420',4444,'2012-04-09','6896'),
('689970',5555,'2018-12-19','6891'),
('689610',5555,'2022-09-27','6898'),
('689240',6666,'2020-04-09','6897'),
('689524',6666,'2021-07-15','6898'),
('689758',6666,'2021-07-09','6896'),
('689759',1111,'2021-09-09','6889'),
('689777',2222,'2022-01-09','6889');
```

--Insert records into the policy_payments table:

```
INSERT INTO Policy_Payments values
(121,4444,'689420','2012-04-09',50000,null),
(345,4444,'689420','2013-04-09',50000,null),
(300,1111,'689317','2012-06-20',20000,null),
(225,1111,'689316','2012-05-18',20000,null),
(227,1111,'689314','1994-04-18',50000,null),
(100,1111,'689314','1995-04-10',50000,null),
(128,1111,'689314','1996-04-11',50000,null),
(096,1111,'689314','1997-04-18',50000,200),
(101,1111,'689314','1998-04-09',50000,null),
(105,1111,'689314','1999-04-08',50000,null),
(120,1111,'689314','2000-04-05',50000,null),
(367,2222,'689318','2012-06-21',20000,null),
(298,3333,'689320','2012-06-18',20000,null),
(420,5555,'689970','2018-12-19',50000,500),
(451,5555,'689610','2022-09-27',2000,null),
(479,6666,'689240','2020-04-09',5000,null),
(099,6666,'689524','2021-07-15',2000,100),
(501,6666,'689758','2021-07-09',50000,null),
(125,1111,'689759','2021-09-09',11000,null),
(721,2222,'689318','2022-01-09',11000,null)
```


5. Tables

1. Address_Details.

```
select * from Address_Details
```

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left displays the database structure, including the 'Address_Details' table. The query window in the center contains the following SQL code:

```
Exec sp_help[Policy_Payments];  
  
select * from Address_Details
```

The Results pane at the bottom displays the output of the query, showing 7 rows of data. The status bar at the bottom indicates that the query was executed successfully.

Address_Id	H_No	city	AddressLine1	State	Pin
1	6-21	Hyderabad	Salm ki gali	Andhra Pradesh	500003
2	7-81	Chennai	Serusari	Tamilnadu	600001
3	3-71	Lucknow	Wajid bhai Road	Uttarpradesh	226001
4	4-81	NavlMumbai	Aroli	Maharashtra	400708
5	5-81	Bangalore	MG Road	Karnataka	530068
6	6-81	Ahamadabad	Street2	Gujarat	320008
7	9-21	Nashik	Timurti Chowk	Maharashtra	422009

2. User_Details

```
SELECT * FROM User_Details;
```

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left displays the database structure, including the 'User_Details' table. The query window in the center contains the following SQL code:

```
SELECT * FROM User_Details;
```

The Results pane at the bottom displays the output of the query, showing 6 rows of data. The status bar at the bottom indicates that the query was executed successfully.

User_Id	First Name	Last Name	Email	MobileNo	Address_Id	DOB
1111	Raju	Reddy	raju@gmail.com	9854261456	5	1986-04-11
2222	Javed	Khanna	javedk@gmail.com	9854261463	1	1990-04-11
3333	Naveen	Reddy	naveen@gmail.com	9854261496	2	1985-03-14
4444	Raghav	Patil	raghavp@gmail.com	9854261412	4	1985-09-21
5555	Harsha	Pandey	harsha@gmail.com	9854261445	3	1992-10-11
6666	Amit	Shah	amits@gmail.com	9896954523	6	1994-12-04

3. Ref_Policy_Types

```
SELECT * FROM Ref_Policy_Types;
```

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL statement:

```
select * from Address_Details
select * from User_Policies
SELECT * FROM Ref_Policy_Types;
```

The Results pane displays the output of the query, showing a table with two columns: Policy_Type_Code and Policy_Type_name. The data is as follows:

Policy_Type_Code	Policy_Type_name
58539	Home
58583	Life
58934	Car
58936	Bike
58969	Term
58979	Health

The status bar at the bottom indicates that the query was executed successfully, returning 6 rows.

4. Policy_Sub_Types

```
SELECT * FROM Policy_Sub_Types;
```

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL statement:

```
SELECT * FROM Ref_Policy_Types;
SELECT * FROM Policy_Sub_Types;
```

The Results pane displays the output of the query, showing a table with nine columns: Policy_Type_Id, Policy_Type_Code, Description, YearsofPayments, amount, MaturityPeriod, MaturityAmount, and Validity. The data is as follows:

Policy_Type_Id	Policy_Type_Code	Description	YearsofPayments	amount	MaturityPeriod	MaturityAmount	Validity
6889	58979	Single Health	1	11000	NULL	500000	1
6891	58979	Group Health	1	50000	NULL	2000000	1
6893	58934	Theft	1	10000	NULL	200000	1
6894	58934	Accident	1	50000	NULL	500000	3
6895	58539	Fire	1	50000	NULL	500000	3
6896	58683	Anand Life	7	50000	15	1500000	NULL
6897	58683	Sukh Life	10	5000	13	300000	NULL
6898	58936	Accident	1	2000	NULL	30000	3
6899	58936	Theft	1	5000	NULL	50000	1

The status bar at the bottom indicates that the query was executed successfully, returning 9 rows.

5. User_Policies

SELECT * FROM User_Policies;

Insurance project.sql - DipYog\Insurance (DIPYOG\dipak (59)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Object Explorer

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 - Programmability
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Query Editor

```
SELECT * FROM Policy_Sub_Types;
SELECT * FROM User_Policies;
```

Results

Policy_No	User_Id	Date_Registered	Policy_Type_Id
689240	6666	2020-04-09	6897
689314	1111	1994-04-18	6896
689316	1111	2012-05-18	6895
689317	1111	2012-06-20	6894
689318	2222	2012-06-21	6894
689320	3333	2012-06-18	6894
689420	4444	2012-04-09	6896
689524	6666	2021-07-15	6898
689610	5555	2022-09-27	6898
689758	6666	2021-07-09	6896
689759	1111	2021-09-09	6889
689777	2222	2022-01-09	6889
689970	5555	2018-12-19	6891

Query executed successfully.

DipYog (15.0 RTM) DIPYOG\dipak (59) Insurance 00:00:00 13 rows

6. Policy_Payments

SELECT * FROM Policy_Payments;

Insurance project.sql - DipYog\Insurance (DIPYOG\dipak (59)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Object Explorer

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 - Mysql
 - Project
 - SQLServer
 - Security

Query Editor

```
SELECT * FROM Policy_Payments;
```

Results

ReceiptNo	User_Id	Policy_No	DateofPayment	amount	fine
96	1111	689314	1997-04-18	50000	200
99	6666	689524	2021-07-15	2000	100
100	1111	689314	1995-04-10	50000	NULL
101	1111	689314	1998-04-09	50000	NULL
105	1111	689314	1999-04-08	50000	NULL
120	1111	689314	2000-04-05	50000	NULL
121	4444	689420	2012-04-09	50000	NULL
125	1111	689759	2021-09-09	11000	NULL
128	1111	689314	1996-04-11	50000	NULL
225	1111	689316	2012-05-18	20000	NULL
227	1111	689314	1994-04-18	50000	NULL
298	3333	689320	2012-06-18	20000	NULL
300	1111	689317	2012-06-20	20000	NULL
345	4444	689420	2013-04-09	50000	NULL
367	2222	689318	2012-06-21	20000	NULL
420	5555	689970	2018-12-19	50000	500
451	5555	689610	2022-09-27	2000	NULL
479	6666	689240	2020-04-09	5000	NULL
501	6666	689758	2021-07-09	50000	NULL
721	2222	689318	2022-01-09	11000	NULL

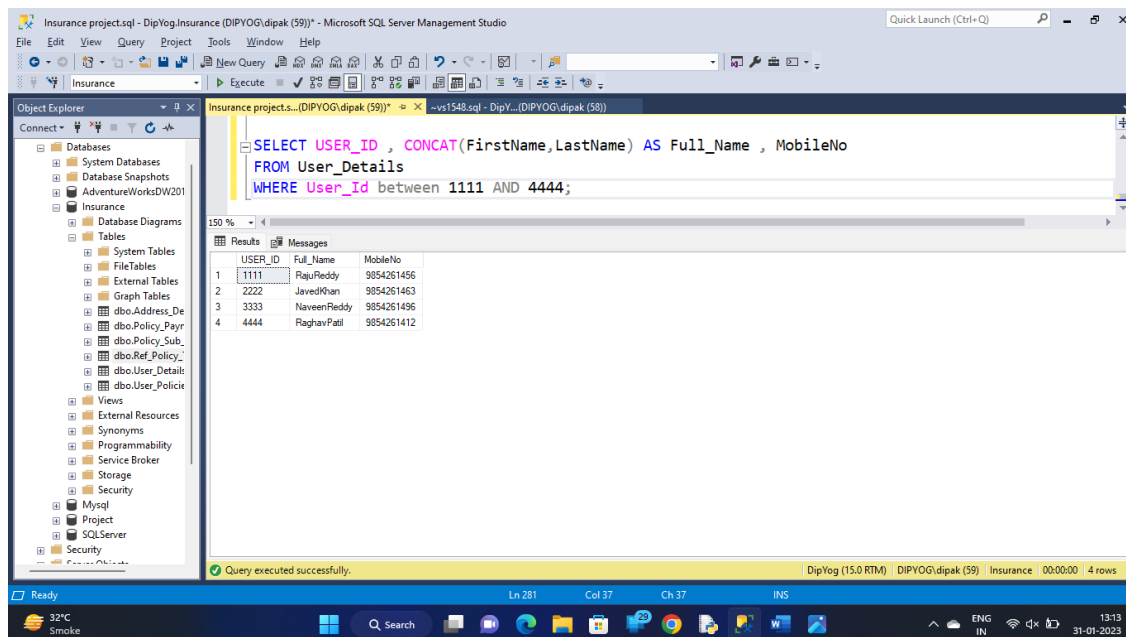
Query executed successfully.

DipYog (15.0 RTM) DIPYOG\dipak (59) Insurance 00:00:00 20 rows

6 BASIC QUERYS

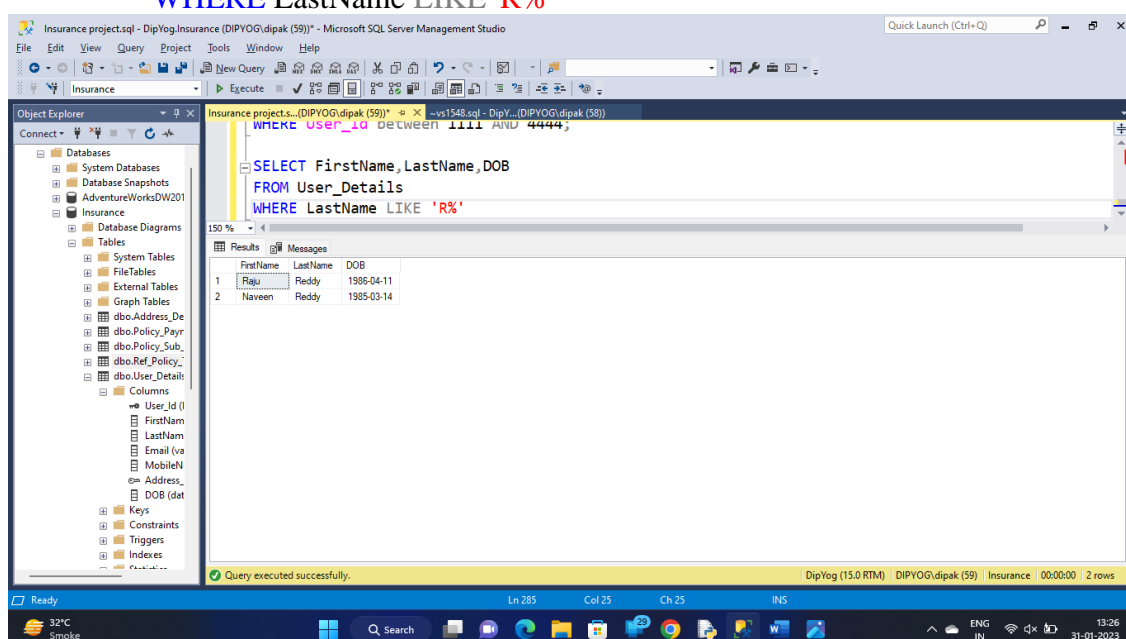
1. Select USER_ID , Full_Name , MobileNo, between 1111 to 4444 from User_Details;

```
SELECT USER_ID , CONCAT(FirstName,LastName) AS Full_Name , MobileNo  
FROM User_Details  
WHERE User_Id between 1111 AND 4444;
```



2. Select FirstName, LastName, DOB Start With 'R' From User_Details

```
SELECT FirstName, LastName, DOB  
FROM User_Details  
WHERE LastName LIKE 'R%'
```



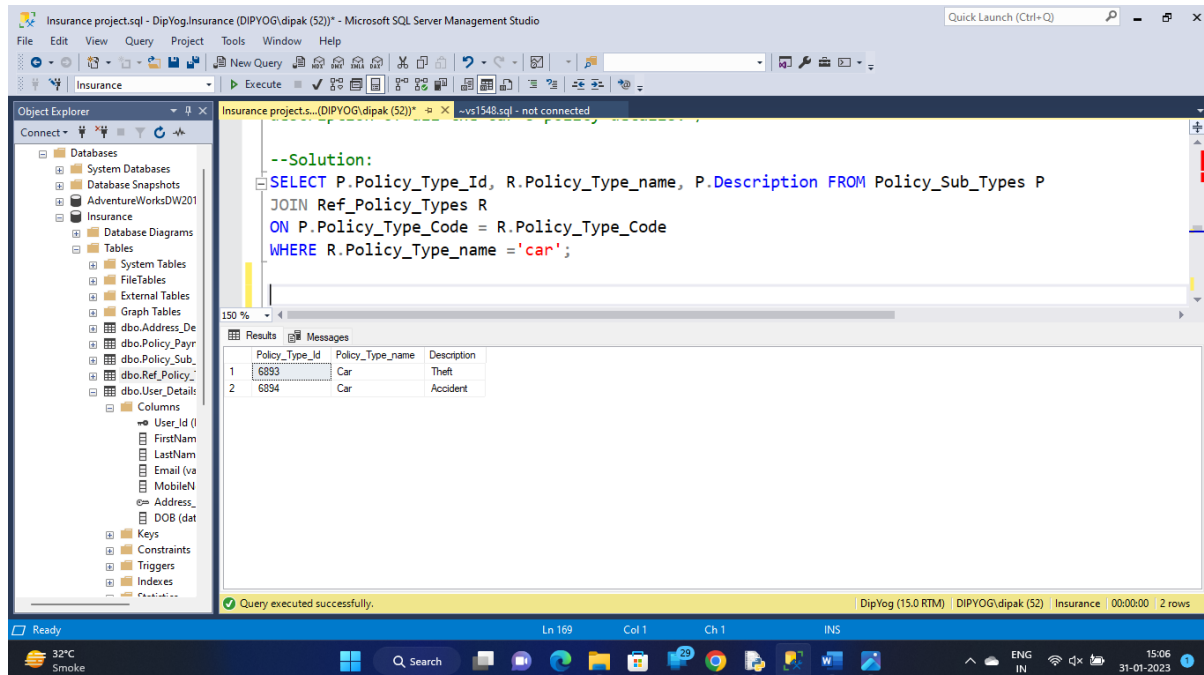
COMMPLEX QUERYS

Problem 1:

Write a query to display the PolicyTypeId, PolicyTypeName, description of all the car's policy details.

--Solution:

```
SELECT P.Policy_Type_Id, R.Policy_Type_name, P.Description
FROM Policy_Sub_Types P
JOIN Ref_Policy_Types R
ON P.Policy_Type_Code = R.Policy_Type_Code
WHERE R.Policy_Type_name = 'car';
```



Problem 2: Write a query to display the policytypecode, no of policies in each code with alias name NO_OF_POLICIES.

--Solution:

```
SELECT Policy_Type_Code, COUNT(Policy_Type_Code) As No_Of_Policies
FROM Policy_Sub_Types
GROUP BY Policy_Type_Code;
```

Problem 2:
Write a query to display the policytypecode, no of policies in each code with alias name NO_OF_POLICIES.*

--Solution:

```
SELECT Policy_Type_Code, COUNT(Policy_Type_Code) As No_Of_Policies
FROM Policy_Sub_Types
GROUP BY Policy_Type_Code;
```

Policy_Type_Code	No_Of_Policies
58539	1
58683	2
58934	2
58936	2
58979	2

Problem 3:

Write a query to display the userid, firstname, lastname, email, mobileneno, house no, state who are residing in NaviMumbai.

--Solution:

```
SELECT UD.User_Id, UD.FirstName, UD.LastName, UD.Email,
UD.MobileNo, AD.H_No, AD.State
FROM User_Details UD
JOIN Address_Details AD
ON UD.Address_Id=AD.Address_Id
WHERE AD.city='NaviMumbai'
```

Problem 3:
Write a query to display the userid,firstname,lastname, email,mobileneno, house no, state who are residing in NaviMumbai.*

--Solution:

```
SELECT UD.User_Id, UD.FirstName, UD.LastName, UD.Email, UD.MobileNo, AD.H_No, AD.State
FROM User_Details UD
JOIN Address_Details AD
ON UD.Address_Id=AD.Address_Id
WHERE AD.city='NaviMumbai'
```

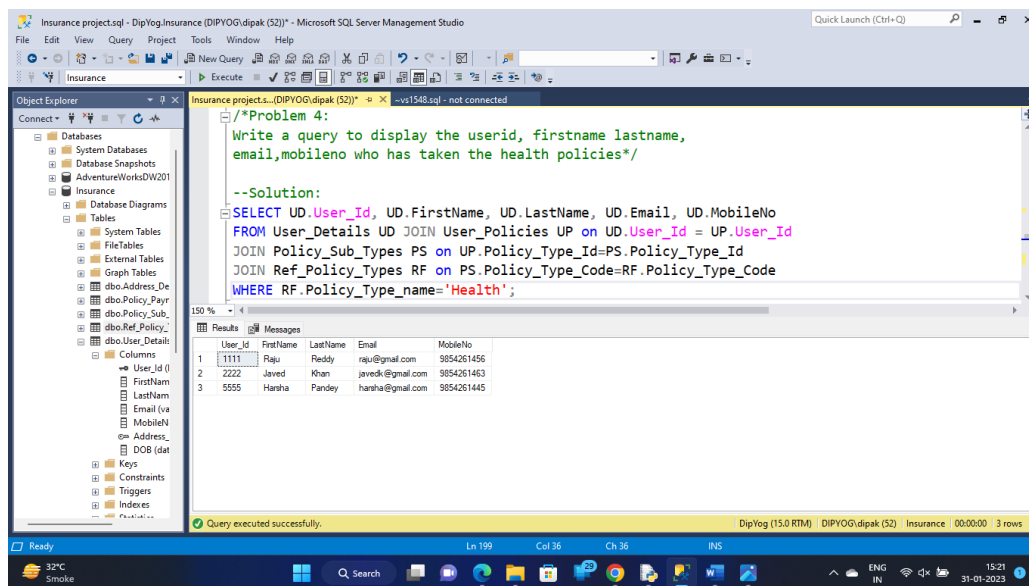
User_Id	FirstName	LastName	Email	MobileNo	H_No	State
4444	Raghav	Patel	raghavp@gmail.com	9854261412	4-81	Maharashtra

Problem 4: Write a query to display the userid, firstname lastname, email, MobileNo who has taken the health policies

--Solution:

```
SELECT UD.User_Id, UD.FirstName, UD.LastName, UD.Email, UD.MobileNo
FROM User_Details UD JOIN User_Policies UP on UD.User_Id = UP.User_Id
JOIN Policy_Sub_Types PS on UP.Policy_Type_Id=PS.Policy_Type_Id
JOIN Ref_Policy_Types RF on PS.Policy_Type_Code=RF.Policy_Type_Code
```

WHERE RF.Policy_Type_name='Health';



Problem 5: Write a query to display the User_Id, first name, last name who has taken the car policies but not home policies.

--Solution:

```

SELECT User_Id, FirstName, LastName
FROM User_Details
WHERE User_Id in
(SELECT User_Id FROM User_Policies where
Policy_Type_Id in
(SELECT Policy_Type_Id FROM Policy_Sub_Types
WHERE Policy_Type_Code=
(SELECT Policy_Type_Code FROM Ref_Policy_Types
WHERE Policy_Type_name='CAR')) AND
User_Id NOT in
(SELECT User_Id FROM User_Policies where
Policy_Type_Id in
(SELECT Policy_Type_Id FROM Policy_Sub_Types
WHERE Policy_Type_Code=
(SELECT Policy_Type_Code FROM Ref_Policy_Types
WHERE Policy_Type_name='HOME'))));

```

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left displays the database structure, including tables like User_Details, User_Policies, Policy_Sub_Types, and Ref_Policy_Types. The central query window contains the following SQL code:

```
--Problem 5:
/*Write a query to display the userid, firstname,last name who has taken the car
policies but not home policies.*/
--Solution:
SELECT User_Id, FirstName, LastName
FROM User_Details
WHERE User_Id in
(SELECT User_Id FROM User_Policies where
Policy_Type_Id in
(SELECT Policy_Type_Id FROM Policy_Sub_Types
WHERE Policy_Type_Code=
(SELECT Policy_Type_Code FROM Ref_Policy_Types
WHERE Policy_Type_name='CAR')) AND
User_Id NOT in
(SELECT User_Id FROM User_Policies where
Policy_Type_Id in
(SELECT Policy_Type_Id FROM Policy_Sub_Types
WHERE Policy_Type_Code=
(SELECT Policy_Type_Code FROM Ref_Policy_Types
WHERE Policy_Type_name='HOME')));
```

The Results pane at the bottom shows the output of the query:

	User_Id	FirstName	LastName
1	2222	Javed	Khan
2	3333	Naveen	Reddy

The status bar at the bottom indicates the query was executed successfully, returning 2 rows.

Problem 6: Write a query to display the userid, first name, last name, city state whose city is ending with 'bad'.

--Solution:

```
select ud.user_id, first name, last name, ad.city, ad.state
from user_details ud join address_details ad on
ud.address_id=ad.address_id
where ad.city like '%bad';
```


Problem 6:
Write a query to display the userid, firstname, lastname, city state whose city is ending with 'bad'.

--Solution:

```
select ud.user_id,firstname,lastname,ad.city,ad.state from
user_details ud join address_details ad on
ud.address_id=ad.address_id
where ad.city like '%bad';
```

user_id	firstname	lastname	city	state
2222	Javed	Khan	Hyderabad	Andhra Pradesh
6666	Amit	Shah	Ahamadabad	Gujarat

Query executed successfully.

Problem 7: Write a query to display the userid, firstname, lastname, policyno, date of registered who has registered before 2020.

--Solution:

```
select up.user_id,firstname,lastname,policy_no, date_registered
from user_policies up join
user_details ud on
up.user_id=ud.user_id
where up.date_registered < '2020';
```

Problem 7:
Write a query to display the userid, firstname, lastname ,policyno, date of registered who has registered before 2020.

--Solution:

```
select up.user_id,firstname,lastname,policy_no, date_registered
from user_policies up join
user_details ud on
up.user_id=ud.user_id
where up.date_registered < '2020';
```

user_id	firstname	lastname	policy_no	date_registered
1111	Raju	Reddy	689314	1994-04-18
1111	Raju	Reddy	689316	2012-05-18
1111	Raju	Reddy	689317	2012-06-20
2222	Javed	Khan	689318	2012-06-21
3333	Naveen	Reddy	689320	2012-06-18
4444	Raghav	Pati	689420	2012-04-09
5555	Hansha	Pandey	689970	2018-12-19

Query executed successfully.

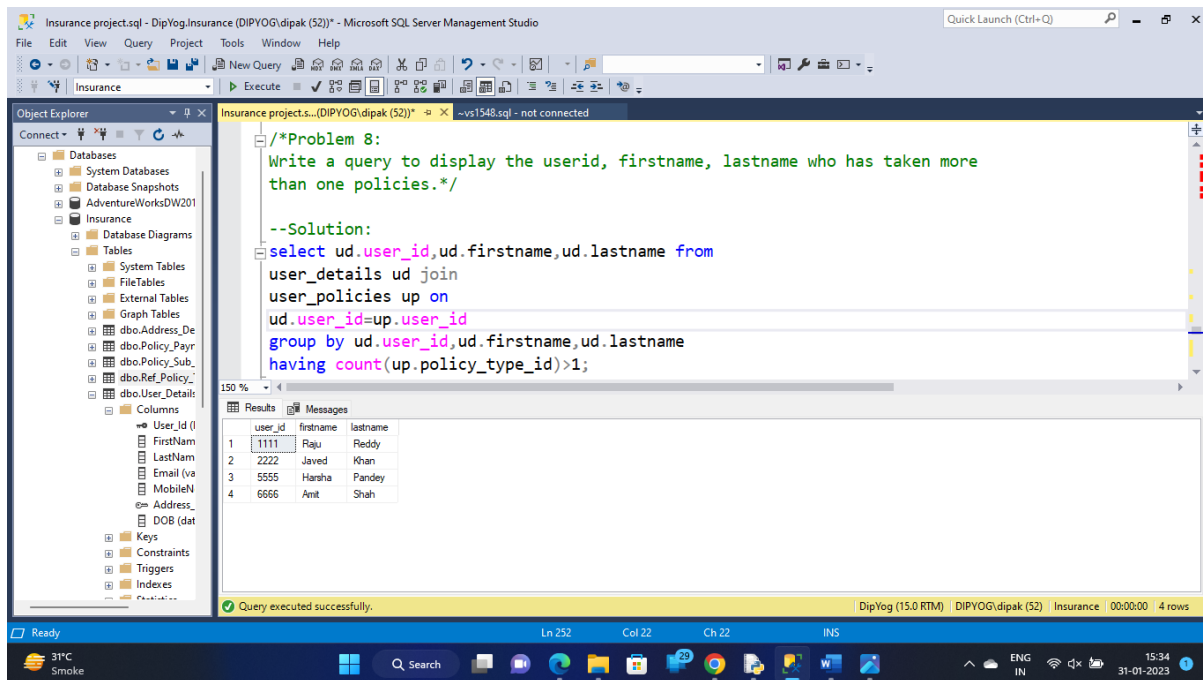
Problem 8:

Write a query to display the userid, firstname, lastname who has taken more than one policies.

--Solution:

```
select ud.user_id,ud.firstname,ud.lastname from
user_details ud join
```

```
user_policies up on
ud.user_id=up.user_id
group by ud.user_id,ud.firstname,ud.lastname
having count(up.policy_type_id)>1;
```



VIEW

/CREATE VIEW ON USER DETAILS , ADDRESS DETAILS

CREATE VIEW USER_ADDRESS_DETAILS

AS

SELECT User_Id, FirstName, LastName,city,State,Pin

FROM User_Details UD JOIN Address_Details AD

ON UD.Address_Id=AD.Address_Id

SELECT * FROM USER_ADDRESS_DETAILS

The screenshot displays the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure, including tables like `dbo.Address_Details` and `dbo.User_Details`. The central query editor contains the following SQL script:

```
/* CREATE VIEW ON USER DETAILS , ADDRESS DETAILS*/  
CREATE VIEW USER_ADDRESS_DETAILS  
AS  
SELECT User_Id, FirstName, LastName,city,State,Pin  
FROM User_Details UD JOIN Address_Details AD  
ON UD.Address_Id=AD.Address_Id  
  
SELECT * FROM USER_ADDRESS_DETAILS
```

The Results pane at the bottom shows the output of the query, displaying a table with 6 rows and 6 columns: `User_Id`, `FirstName`, `LastName`, `city`, `State`, and `Pin`.

User_Id	FirstName	LastName	city	State	Pin
1111	Raju	Reddy	Bangalore	Karnataka	530068
2222	Javed	Khan	Hyderabad	Andhra Pradesh	500003
3333	Naveen	Reddy	Chennai	Tamilnadu	600001
4444	Raghav	Patil	NaviMumbai	Maharashtra	400708
5555	Hanisha	Pandey	Lucknow	Uttarpradesh	226001
6666	Amit	Shah	Ahmadabad	Gujarat	320008

The status bar at the bottom indicates that the query was executed successfully, returning 6 rows.