

1. Find out the selling cost AVG for packages developed in Pascal.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays a T-SQL query:

```
SELECT AVG(SCOST) AVG_COST FROM software WHERE DEVELOPIN='PASCAL'
```

The results pane shows the output:

| AVG_COST    |
|-------------|
| 3066.650000 |

At the bottom, a message indicates: "Query executed successfully."

2. Display Names, Ages of all Programmers.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays a T-SQL query:

```
SELECT AVG(SCOST) AVG_COST FROM software WHERE DEVELOPIN='PASCAL'
```

Below it, another query is shown:

```
SELECT PNAME , DATEDIFF(YY,DOB,GETDATE()) AGE FROM programmer
```

The results pane shows the output:

| PNAME   | AGE |
|---------|-----|
| ANAND   | 56  |
| ALTAF   | 58  |
| JULIANA | 62  |
| KAMALA  | 54  |
| MARY    | 52  |
| NELSON  | 37  |
| PATRICK | 57  |
| QADIR   | 57  |
| RAAMESH | 55  |
| REBECCA | 55  |
| REMITHA | 52  |
| REVATHI | 53  |
| VIJAYA  | 57  |

At the bottom, a message indicates: "Query executed successfully."

3. Display the Names of those who have done the DAP Course.

The screenshot shows the Microsoft SQL Server Management Studio (SSMS) interface. The title bar reads "SQLhandsON.sql - LENOVO\AGNIS.Internal\_Asgn (Lenovo\User (53)) - Microsoft SQL Server Management Studio". The left pane is the Object Explorer, displaying the database structure for "LENOVO\AGNIS (SQL Server 15.0.2095.3 - Len...)" under the "Databases" node. The "Internal\_Asgn" database is selected. The right pane contains a query window with the following content:

```
SELECT PNAME, COURSE FROM studies WHERE COURSE='DAP'
```

The results pane shows the following data:

|   | PNAME   | COURSE |
|---|---------|--------|
| 1 | NELSON  | DAP    |
| 2 | REVATHI | DAP    |

At the bottom, a message indicates "Query executed successfully." and the status bar shows "LENVO\AGNIS (15.0 RTM) | Lenovo\User (53) | Internal\_Asgn | 00:00:00 | 2 rows".

4. Display the Names and Date of Births of all Programmers Born in January.

The screenshot shows the Microsoft SQL Server Management Studio interface. The title bar indicates the connection is to 'SQLhandsOn.sql - LENOVO\AGNIS.Internal\_Asgn (Lenovo\User (53))'.

The Object Explorer sidebar on the left lists the database structure, including the 'Internal\_Asgn' database and its tables: 'programmer', 'dbo.software', 'dbo.studies', and 'Northwind'.

The main query editor window contains the following T-SQL code:

```
SELECT PNAME AS NAME, DOB FROM programmer WHERE MONTH(DOB)=1
```

The results pane shows the output of the query:

|   | NAME    | DOB        |
|---|---------|------------|
| 1 | JULIANA | 1960-01-31 |
| 2 | REBECCA | 1967-01-01 |

At the bottom of the screen, a message states 'Query executed successfully.' and the status bar shows 'LENVO\AGNIS (15.0 RTM) | Lenovo\User (53) | Internal\_Asgn | 00:00:00 | 2 rows'.

5. What is the Highest Number of copies sold by a Package?

SQLhandsON.sql - LENOVO\AGNIS.Internal\_Assgn (Lenovo\User (53)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Quick Launch (Ctrl+Q)

Internal\_Assgn | Internal\_Assgn | Execute | New Query |

Object Explorer

Connect -> LENOVO\AGNIS (SQL Server 15.0.2095.3 - Len)

- Databases
  - System Databases
  - Database Snapshots
  - Internal\_Assgn
  - Tables
    - System Tables
    - FileTables
    - External Tables
    - Graph Tables
    - dbo.programmer
    - dbo.software
    - dbo.studies
  - Views
  - External Resources
  - Synonyms
  - Programmability
  - Service Broker
  - Storage
  - Security
- Northwind
- Trendz
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

SQLhandsON.sql - L\_(Lenovo\User (53)) | 13\_Oct\_22\_SubQuery...ql - not connected | 07\_Oct\_22\_DDL\_DML...l - not connected

```
SELECT PNAME AS NAME, DOB FROM programmer WHERE MONTH(DOB)=1
```

```
SELECT MAX(SOLD) Sales FROM SOFTWARE
```

Results Messages

| Sales |
|-------|
| 84    |

Query executed successfully.

LENOVO\AGNIS (15.0 RTM) | Lenovo\User (53) | Internal\_Assgn | 00:00:00 | 1 rows

Ln 83 Col 1 Ch 1 INS

Ready

## 6. Display lowest course Fee.

SQLhandsON.sql - LENOVO\AGNIS.Internal\_Assgn (Lenovo\User (53)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Quick Launch (Ctrl+Q)

Internal\_Assgn | Internal\_Assgn | Execute | New Query |

Object Explorer

Connect -> LENOVO\AGNIS (SQL Server 15.0.2095.3 - Len)

- Databases
  - System Databases
  - Database Snapshots
  - Internal\_Assgn
  - Tables
    - System Tables
    - FileTables
    - External Tables
    - Graph Tables
    - dbo.programmer
    - dbo.software
    - dbo.studies
  - Views
  - External Resources
  - Synonyms
  - Programmability
  - Service Broker
  - Storage
  - Security
- Northwind
- Trendz
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

SQLhandsON.sql - L\_(Lenovo\User (53)) | 13\_Oct\_22\_SubQuery...ql - not connected | 07\_Oct\_22\_DDL\_DML...l - not connected

```
SELECT PNAME AS NAME, DOB FROM programmer WHERE MONTH(DOB)=1
```

```
SELECT MAX(SOLD) Sales FROM SOFTWARE
```

```
SELECT MIN(COURSE_FEE) Fees FROM studies
```

Results Messages

| Fees |
|------|
| 4500 |

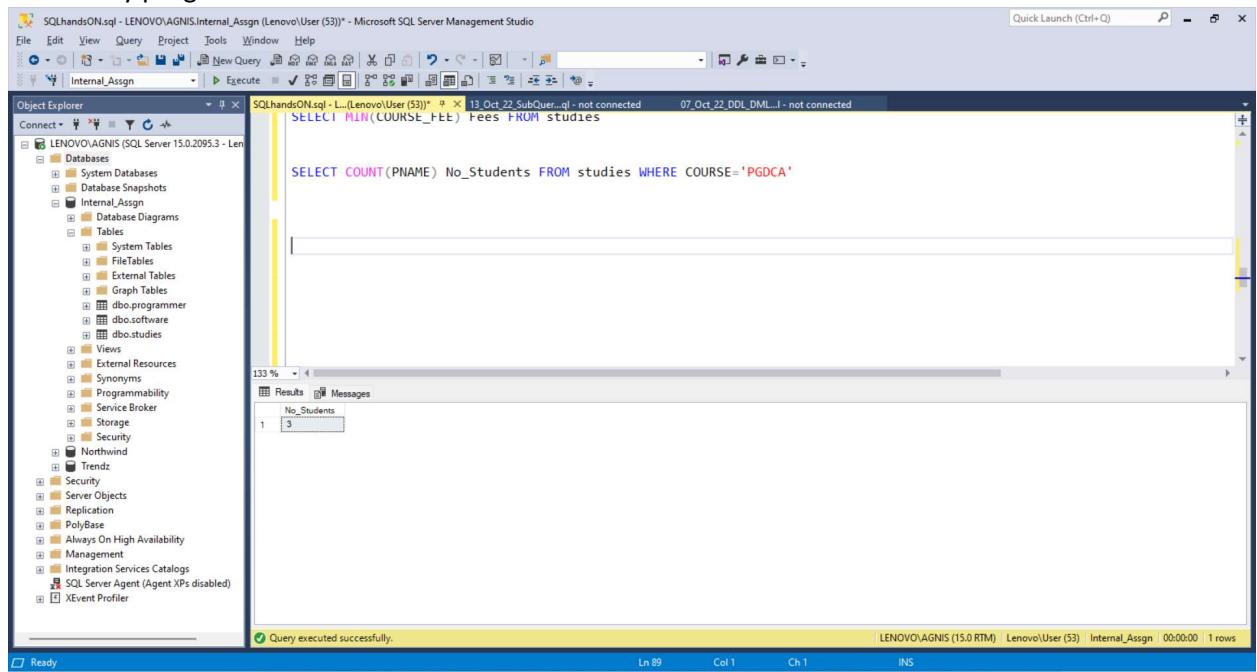
Query executed successfully.

LENOVO\AGNIS (15.0 RTM) | Lenovo\User (53) | Internal\_Assgn | 00:00:00 | 1 rows

Ln 85 Col 1 Ch 1 INS

Ready

## 7. How many programmers done the PGDCA Course?

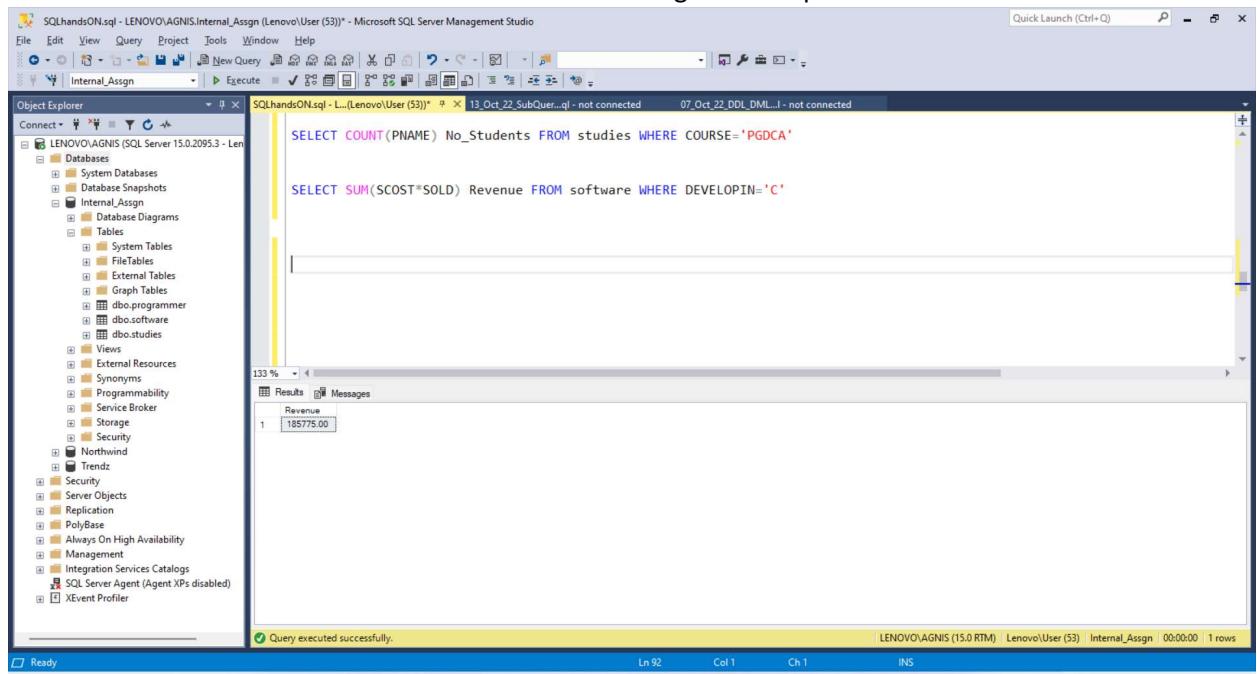


```
SELECT COUNT(PNAME) No_Students FROM studies WHERE COURSE='PGDCA'
```

| No_Students |
|-------------|
| 1           |
| 3           |

```
SELECT MIN(COURSE_FEE) Fees FROM studies
```

## 8. How much revenue has been earned thru sales of Packages Developed in C.



```
SELECT COUNT(PNAME) No_Students FROM studies WHERE COURSE='PGDCA'
```

| No_Students |
|-------------|
| 1           |
| 3           |

```
SELECT SUM(SCOST*SOLD) Revenue FROM software WHERE DEVELOPIN='C'
```

| Revenue   |
|-----------|
| 1         |
| 185775.00 |

## 9. Display the Details of the Software Developed by Ramesh.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a connection to 'LENOVO\AGNIS (SQL Server 15.0.2095.3 - Len...'. The 'Tables' node under 'Internal\_Assgn' is expanded, showing 'dbo.programmer', 'dbo.software', and 'dbo.studies'. The 'dbo.software' table is selected. The 'Script' button next to it is highlighted. The 'Script' pane at the bottom has the command:

```
SELECT * FROM software WHERE PNAME='RAMESH'
```

The 'Results' pane displays the query results:

| PNAME    | TITLE       | DEVELOPIN | SCOST    | DCOST | SOLD |
|----------|-------------|-----------|----------|-------|------|
| 1 RAMESH | HOTEL MQMT. | DBASE     | 13000.00 | 35000 | 4    |
| 2 RAMESH | DEAD LEE    | PASCAL    | 599.95   | 4500  | 73   |

Below the results, a message says 'Query executed successfully.' and the status bar indicates 'Ln 96 Col 1 Ch 1 INS'.

## 10. How many Programmers Studied at Sabhari?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a connection to 'LENOVO\AGNIS (SQL Server 15.0.2095.3 - Len...'. The 'Tables' node under 'Internal\_Assgn' is expanded, showing 'dbo.programmer', 'dbo.software', and 'dbo.studies'. The 'dbo.studies' table is selected. The 'Script' button next to it is highlighted. The 'Script' pane at the bottom has the command:

```
SELECT Count(*) FROM studies WHERE INSTITUTE='SABHARI'
```

The 'Results' pane displays the query results:

| (No column name) |
|------------------|
| 1 4              |

Below the results, a message says 'Query executed successfully.' and the status bar indicates 'Ln 95 Col 16 Ch 16 INS'.

## 11. Display details of Packages whose sales crossed the 2000 Mark.

The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer, the database 'Internal\_Assgn' is selected. In the center pane, a query window displays the following T-SQL code:

```
SELECT COUNT(*) FROM studies WHERE INSTITUTE= 'SABHARI'

SELECT TITLE, SUM(SCOST*SOLD) AS TOTAL_REVENUE FROM software
GROUP BY TITLE HAVING SUM(SCOST*SOLD)>2000
```

The results grid shows the following data:

| TITLE           | TOTAL_REVENUE |
|-----------------|---------------|
| BOMBS AWAY      | 8250.00       |
| CODE GENERATOR  | 103600.00     |
| DEAD LEE        | 43796.35      |
| FINANCIAL ACCT. | 72000.00      |
| HOSPITAL MGMT.  | 2200.00       |
| HOTEL MGMT.     | 52000.00      |
| PARACHUTES      | 17197.85      |
| PAYOUT PKG.     | 63000.00      |
| PC UTILITIES    | 36975.00      |
| README          | 50400.00      |
| TSR EDITOR      | 5400.00       |
| TSR HELP PKG.   | 17500.00      |
| VACCINES        | 38900.00      |
| VIDEO TITLING   | 67500.00      |

At the bottom of the results grid, a message says 'Query executed successfully.'

## 12. Display the Details of Packages for which Development Cost have been recovered.

The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer, the database 'Internal\_Assgn' is selected. In the center pane, a query window displays the following T-SQL code:

```
SELECT * FROM software WHERE (SCOST*SOLD)>DCOST
```

The results grid shows the following data:

| PNAME   | TITLE          | DEVELOPIN | SCOST    | DCOST | SOLD |
|---------|----------------|-----------|----------|-------|------|
| MARY    | README         | CPP       | 300.00   | 1200  | 84   |
| ANAND   | PARACHUTES     | BASIC     | 399.95   | 6000  | 43   |
| ANAND   | VIDEO TITLING  | PASCAL    | 7500.00  | 16000 | 9    |
| KAMALA  | PAYOUT PKG.    | DBASE     | 9000.00  | 20000 | 7    |
| MARY    | CODE GENERATOR | C         | 4500.00  | 20000 | 23   |
| PATRICK | README         | CPP       | 300.00   | 1200  | 84   |
| QADIR   | BOMBS AWAY     | ASSEMBLY  | 750.00   | 3000  | 11   |
| QADIR   | VACCINES       | C         | 1900.00  | 3100  | 21   |
| RAMESH  | HOTEL MGMT.    | DBASE     | 13000.00 | 35000 | 4    |
| RAMESH  | DEAD LEE       | PASCAL    | 599.95   | 4500  | 73   |
| REMITHA | PC UTILITIES   | C         | 725.00   | 5000  | 51   |
| REMITHA | TSR HELP PKG.  | ASSEMBLY  | 2500.00  | 6000  | 7    |
| VIJAYA  | TSR EDITOR     | C         | 900.00   | 700   | 6    |

At the bottom of the results grid, a message says 'Query executed successfully.'

### 13. What is the cost of the costliest software development in Basic?

```
SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (53)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect - Internal_Assgn
LENVOVO\AGNIS (SQL Server 15.0.2095.3 - Len)
  Databases
    System Databases
    Database Snapshots
    Internal_Assgn
      Tables
        System Tables
        FileTables
        External Tables
        Graph Tables
        dbo.programmer
        dbo.software
        dbo.studies
        Views
        External Resources
        Synonyms
        Programmability
        Service Broker
        Storage
        Security
      Northwind
      Trendz
      Security
    Server Objects
    Replication
    PolyBase
    Always On High Availability
    Management
    Integration Services Catalogs
      SQL Server Agent (Agent XPs disabled)
      XEvent Profiler
  Ready

13_Oct_22_SubQuery_ql - not connected 07_Oct_22_DDL_DML...I - not connected
SELECT TITLE, SUM(SCOST*SOLD) AS TOTAL_REVENUE FROM software
GROUP BY TITLE HAVING SUM(SCOST*SOLD)>2000

SELECT * FROM software WHERE (SCOST*SOLD)>DCOST

SELECT TITLE, MAX(SCOST) Cost
FROM software WHERE DEVELOPIN='BASIC'
GROUP BY TITLE

133 %
Results Messages
TITLE Cost
1 PARACHUTES 399.95

Query executed successfully.
Ln 109 Col 16 Ch 16 INS
LENOVO\AGNIS (15.0 RTM) | Lenovo\User (53) | Internal_Assgn | 00:00:00 | 1 rows
```

### 14. How many Packages Developed in DBASE?

```
SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (53)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect - Internal_Assgn
LENVOVO\AGNIS (SQL Server 15.0.2095.3 - Len)
  Databases
    System Databases
    Database Snapshots
    Internal_Assgn
      Tables
        System Tables
        FileTables
        External Tables
        Graph Tables
        dbo.programmer
        dbo.software
        dbo.studies
        Views
        External Resources
        Synonyms
        Programmability
        Service Broker
        Storage
        Security
      Northwind
      Trendz
      Security
    Server Objects
    Replication
    PolyBase
    Always On High Availability
    Management
    Integration Services Catalogs
      SQL Server Agent (Agent XPs disabled)
      XEvent Profiler
  Ready

13_Oct_22_SubQuery_ql - not connected 07_Oct_22_DDL_DML...I - not connected
FROM software WHERE DEVELOPIN='BASIC'
GROUP BY TITLE

SELECT COUNT(*) FROM software WHERE DEVELOPIN='DBASE'

133 %
Results Messages
(No column name)
1 2

Query executed successfully.
Ln 114 Col 1 Ch 1 INS
LENOVO\AGNIS (15.0 RTM) | Lenovo\User (53) | Internal_Assgn | 00:00:00 | 1 rows
```

## 15. How many programmers studied in Pragathi?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a database named 'LENOVO\AGNIS'. The 'Tables' node under it contains 'Internal\_Assgn', 'dbo.programmer', 'dbo.software', and 'dbo.studies'. The 'dbo.studies' table is selected. The main window displays a query in the 'Query Editor':

```
SELECT COUNT(*) FROM studies WHERE INSTITUTE='PRAGATHI'
```

The results pane shows a single row with a value of 3.

Query executed successfully.

LN 120 Col 1 Ch 1 INS

## 16. How many Programmers Paid 5000 to 10000 for their course?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a database named 'LENOVO\AGNIS'. The 'Tables' node under it contains 'Internal\_Assgn', 'dbo.programmer', 'dbo.software', and 'dbo.studies'. The 'dbo.studies' table is selected. The main window displays a query in the 'Query Editor':

```
SELECT COUNT(*) FROM studies WHERE INSTITUTE='PRAGATHI'  
Select PNAME, Course_fee from Studies  
Where Course_fee between 5000 and 10000
```

The results pane shows a list of names and their course fees:

| PNAME   | Course_fee |
|---------|------------|
| ALTAF   | 7200       |
| KAMALA  | 5000       |
| NELSON  | 6200       |
| PATRICK | 5200       |
| REMITHA | 8000       |
| REVATHI | 5000       |

Query executed successfully.

LN 118 Col 40 Ch 40 INS

## 17. What is AVG Course Fee

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane contains a query window with the following SQL code:

```
FROM programmer  
Select AVG(Course_fee)AVGFEEE from Studies
```

The results pane shows the output of the query:

| AvgFee |
|--------|
| 11007  |

Below the results, a message indicates: "Query executed successfully."

## 18. Display the details of the Programmers Knowing C.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane contains two queries:

```
Select PNAME, Course_fee from Studies  
Where Course_fee between 5000 and 10000  
  
Select PNAME,DEVELOPIN from Software  
Where DEVELOPIN = 'C'
```

The results pane shows the output of the second query:

| PNAME   | DEVELOPIN |
|---------|-----------|
| MARY    | C         |
| QADIR   | C         |
| REMITHA | C         |
| VIJAYA  | C         |

Below the results, a message indicates: "Query executed successfully."

### 19. How many Programmers know either COBOL or PASCAL.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a database named 'LENOVO\AGNIS' with various objects like databases, tables, and stored procedures. Two queries are run in the main pane:

```
SELECT PNAME, Course_fee FROM Studies  
WHERE Course_fee between 5000 and 10000  
  
SELECT PNAME,DEVELOPIN FROM Software  
WHERE DEVELOPIN IN ('COBOL', 'PASCAL')
```

The results pane displays the output of the second query:

| PNAME   | DEVELOPIN |
|---------|-----------|
| ANAND   | PASCAL    |
| JULIANA | COBOL     |
| RAAMESH | PASCAL    |
| REVATHI | PASCAL    |

Message bar at the bottom: Query executed successfully.

### 20. How many Programmers Don't know PASCAL and C

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a database named 'LENOVO\AGNIS' with various objects like databases, tables, and stored procedures. Two queries are run in the main pane:

```
SELECT PNAME, Course_fee FROM Studies  
WHERE Course_fee between 5000 and 10000  
  
SELECT PNAME,DEVELOPIN FROM Software  
WHERE DEVELOPIN NOT IN ('COBOL', 'PASCAL')
```

The results pane displays the output of the second query:

| PNAME   | DEVELOPIN |
|---------|-----------|
| MARY    | CPP       |
| ANAND   | BASIC     |
| KAMALA  | DBASE     |
| MARY    | ORACLE    |
| MARY    | C         |
| PATRICK | CPP       |
| QADIR   | ASSEMBLY  |
| QADIR   | C         |
| RAAMESH | DBASE     |
| REMITHA | C         |
| REMITHA | ASSEMBLY  |
| VIJAYA  | C         |

Message bar at the bottom: Query executed successfully.

### 21. How old is the Oldest Male Programmer.

SQLhandsON.sql - LENOVO\AGNIS.Internal\_Assgn (Lenovo\User (52)) - Microsoft SQL Server Management Studio

```
Select PNAME, DATEDIFF(YY, DOB, GETDATE()) AGE FROM PROGRAMMER WHERE (DATEDIFF(YY, DOB, GETDATE()) = (SELECT MAX(DATEDIFF(YY, DOB, GETDATE())) AGE FROM programmer)
```

Results

| PNAME   | AGE |
|---------|-----|
| JULIANA | 62  |

Query executed successfully.

## 22. What is the AVG age of Female Programmers?

SQLhandsON.sql - LENOVO\AGNIS.Internal\_Assgn (Lenovo\User (52)) - Microsoft SQL Server Management Studio

```
SELECT AVG(DATEDIFF(YY, DOB, GETDATE())) AGE
FROM programmer
WHERE GENDER = 'F'
```

Results

| AGE |
|-----|
| 55  |

Query executed successfully.

23. Calculate the Experience in Years for each Programmer and Display with their names in Descending order.

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (52)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾ Internal_Assgn
LENVOVOAGNIS (SQL Server 15.0.2095.3 - Internal_Assgn)
Databases
System Databases
Database Snapshots
Internal_Assgn
Tables
System Tables
FileTables
External Tables
Graph Tables
dbo.programmer
dbo.software
Columns
PNAME (varchar(20))
TITLE (varchar(20), n
DEVELOPIN (varchar
SCOST (decimal(10,0
DCOST (int, null
SOLD (int, null
Keys
Constraints
Triggers
Indexes
Statistics
dbo.studies
Views
External Resources
Synonyms
Programmability
Service Broker
Storage
Security
Northwind
Results Messages
PNAME EXP
1 NELSON 33
2 PATRICK 32
3 ALTAF 32
4 JULIANA 32
5 REBECCA 32
6 MARY 31
7 QADIR 31
8 RAMESH 31
9 ANAND 30
10 KAMALA 30
11 REVATHI 30
12 VIJAYA 30
13 REMITHA 29
Query executed successfully.
LN 137 Col 1 Ch 1 INS
LENOVO\AGNIS (15.0 RTM) | Lenovo\User (52) | Internal_Assgn | 00:00:00 | 13 rows
Ready

```

24. Who are the Programmers who celebrate their Birthday's During the Current Month?

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (52)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾ Internal_Assgn
LENVOVOAGNIS (SQL Server 15.0.2095.3 - Internal_Assgn)
Databases
System Databases
Database Snapshots
Internal_Assgn
Tables
System Tables
FileTables
External Tables
Graph Tables
dbo.programmer
dbo.software
Columns
PNAME (varchar(20))
TITLE (varchar(20), n
DEVELOPIN (varchar
SCOST (decimal(10,0
DCOST (int, null
SOLD (int, null
Keys
Constraints
Triggers
Indexes
Statistics
dbo.studies
Views
External Resources
Synonyms
Programmability
Service Broker
Storage
Security
Northwind
Results Messages
PNAME DOB
1 PATRICK 1965-11-10
Query executed successfully.
LN 140 Col 1 Ch 1 INS
LENOVO\AGNIS (15.0 RTM) | Lenovo\User (52) | Internal_Assgn | 00:00:00 | 1 rows
Ready

```

## 25. How many Female Programmers are there?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a connection to 'LENOVO\AGNIS (SQL Server 15.0.2095.3 - Internal\_Assgn)'. The 'Programmer' table is selected under 'Tables'. The 'Script' button is highlighted. The main window contains the following SQL query:

```
SELECT PNAME, DOB
FROM programmer WHERE (MONTH(DOB)) = DATEPART(MONTH, GETDATE())
Select Count(*) CF from PROGRAMMER
WHERE GENDER = 'F'
```

The results pane shows a single row with 'CF' and a value of 7. A status bar at the bottom indicates 'Query executed successfully.' and other session details.

## 26. What are the Languages studied by Male Programmers.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a connection to 'LENOVO\AGNIS (SQL Server 15.0.2095.3 - Internal\_Assgn)'. The 'Programmer' table is selected under 'Tables'. The 'Script' button is highlighted. The main window contains the following SQL query:

```
SELECT PNAME, DOB
FROM programmer WHERE (MONTH(DOB)) = DATEPART(MONTH, GETDATE())
Select PNAME,PROF1,PROF2  from PROGRAMMER
WHERE GENDER = 'M'
```

The results pane displays a table with 6 rows, listing the names of male programmers along with their first and second programming languages. The table has columns: PNAME, PROF1, and PROF2.

| PNAME   | PROF1    | PROF2   |
|---------|----------|---------|
| ANAND   | PASCAL   | BASIC   |
| ALTAF   | CLIPPER  | COBOL   |
| NELSON  | COBOL    | DBASE   |
| PATRICK | PASCAL   | CLIPPER |
| QADIR   | ASSEMBLY | C       |
| RAMESH  | PASCAL   | DBASE   |

A status bar at the bottom indicates 'Query executed successfully.' and other session details.

## 27. What is the AVG Salary?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane contains the following SQL code:

```
SELECT PNAME, DOB
FROM programmer WHERE (MONTH(DOB)) = DATEPART(MONTH, GETDATE())
Select AVG(SALARY) AVGSALARY
from PROGRAMMER
```

The results pane shows a single row with the value 3169.

Query executed successfully.

LN 142 Col 1 Ch 1 INS

## 28. How many people draw salary 2000 to 4000?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane contains the following SQL code:

```
Select COUNT(*) CP
from PROGRAMMER
WHERE SALARY between 2000 and 4000
```

The results pane shows a single row with the value 12.

Query executed successfully.

LN 144 Col 1 Ch 1 INS

29. Display the details of those who don't know Clipper, COBOL or PASCAL.

The screenshot shows the Microsoft SQL Server Management Studio interface. The title bar reads "SQLhandsON.sql - LENOVO\AGNIS.Internal\_Asgn (Lenovo\User (52)) - Microsoft SQL Server Management Studio". The left pane is the Object Explorer, showing the database structure for "LENOVO\AGNIS (SQL Server 15.0.2095.3)". The right pane contains a query window with the following content:

```
SQLhandsON.sql - LENOVO\AGNIS (Lenovo\User (52)) * 13_Oct_22_SubQuery...sql - not connected 07_Oct_22_DDL_DML...l - not connected
Select *
from PROGRAMMER
WHERE PROF1 not in ('CLIPPER', 'PASCAL', 'COBOL')
AND PROF2 not in ('CLIPPER', 'PASCAL', 'COBOL')
```

The results pane shows the output of the query:

|   | PNAME   | DOB        | DOJ        | GENDER | PROF1    | PROF2    | SALARY |
|---|---------|------------|------------|--------|----------|----------|--------|
| 1 | KAMALA  | 1968-10-30 | 1992-01-02 | F      | C        | DBASE    | 2900   |
| 2 | MARY    | 1970-06-24 | 1991-02-01 | F      | CPP      | ORACLE   | 4500   |
| 3 | QADIR   | 1965-08-31 | 1991-04-21 | M      | ASSEMBLY | C        | 3000   |
| 4 | REMITHA | 1970-04-19 | 1993-04-20 | F      | C        | ASSEMBLY | 3600   |
| 5 | VIJAYA  | 1965-12-14 | 1992-05-02 | F      | FOXPRO   | C        | 3500   |

At the bottom, a message box indicates "Query executed successfully." and the status bar shows "LENVO\AGNIS (15.0 RTM) | Lenovo\User (52) | Internal\_Asgn | 00:00:00 | 5 rows".

30. Display the Cost of Package Developed By each Programmer.

The screenshot shows the Microsoft SQL Server Management Studio interface. The title bar reads "SQLhandsON.sql - LENOVO\AGNIS.Internal\_Asgn (Lenovo\User (52)) - Microsoft SQL Server Management Studio". The Object Explorer on the left shows a connection to "LENOVO\AGNIS (SQL Server 15.0.2095.3)". The current database is "Internal\_Asgn". The Results pane displays the output of a query:

```
AND PROF2 not in ('CLIPPER','PASCAL','COBOL')

Select PNAME, SUM(DCOST) DEV COST from Software
Group by PNAME
```

| PNAME   | DEV COST |
|---------|----------|
| ANAND   | 22000    |
| JULIANA | 3500     |
| KAMALA  | 20000    |
| MARY    | 106200   |
| PATRICK | 1200     |
| QADIR   | 6100     |
| RAMESH  | 39500    |
| REMITHA | 11000    |
| REVATHI | 75000    |
| VIJAYA  | 700      |

At the bottom, a message says "Query executed successfully." and the status bar indicates "LENVO\AGNIS (15.0 RTM) | Lenovo\User (52) | Internal\_Asgn | 00:00:00 | 10 rows".

**31. Display the sales values of the Packages Developed by the each Programmer.**

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays a T-SQL query:

```
Group by PNAME  
Select PNAME, SUM(SCOST+SOLD) SALEREV from Software  
Group by PNAME
```

The results pane shows the following data:

| PNAME   | SALEREV   |
|---------|-----------|
| ANAND   | 84697.85  |
| JULIANA | 0.00      |
| KAMALA  | 83000.00  |
| MARY    | 200700.00 |
| PATRICK | 25200.00  |
| QADIR   | 48150.00  |
| RAMESH  | 95796.35  |
| REMITHA | 54475.00  |
| REVATHI | 2200.00   |
| VIJAYA  | 5400.00   |

Below the results, a message indicates: "Query executed successfully." and "LENVO\AGNIS (15.0 RTM) | Lenovo\User (S2) | Internal\_Assgn | 00:00:00 | 10 rows".

**32. Display the Number of Packages sold by Each Programmer.**

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays a T-SQL query:

```
Group by PNAME  
Select PNAME, SUM(SOLD) SALECOUNT from Software  
Group by PNAME
```

The results pane shows the following data:

| PNAME   | SALECOUNT |
|---------|-----------|
| ANAND   | 52        |
| JULIANA | 0         |
| KAMALA  | 7         |
| MARY    | 111       |
| PATRICK | 84        |
| QADIR   | 32        |
| RAMESH  | 77        |
| REMITHA | 58        |
| REVATHI | 2         |
| VIJAYA  | 6         |

Below the results, a message indicates: "Query executed successfully." and "LENVO\AGNIS (15.0 RTM) | Lenovo\User (S2) | Internal\_Assgn | 00:00:00 | 10 rows".

**33. Display the sales cost of the packages Developed by each Programmer Language wise**

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (52)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾ Internal_Assgn
LENVO\AGNIS (SQL Server 15.0.2095.3 - Internal_Assgn)
  Databases
    System Databases
    Database Snapshots
    Internal_Assgn
      Tables
        Software
          Columns
            PNAME (varchar(20))
            TITLE (varchar(20), not null)
            DEVELOPIN (varchar(10))
            SCOST (decimal(10,2))
            DCOST (int, null)
            SOLD (int, null)
          Keys
          Constraints
          Triggers
          Indexes
          Statistics
        dbo.studies
      Views
      External Resources
      Synonyms
      Programmability
      Service Broker
      Storage
      Security
    Northwind
  Tables
    System Tables
    FileTables
    External Tables
    Graph Tables
    dbo.programmer
    dbo.software
      Columns
        PNAME (varchar(20))
        TITLE (varchar(20), not null)
        DEVELOPIN (varchar(10))
        SCOST (decimal(10,2))
        DCOST (int, null)
        SOLD (int, null)
      Keys
      Constraints
      Triggers
      Indexes
      Statistics
    dbo.studies
  Views
  External Resources
  Synonyms
  Programmability
  Service Broker
  Storage
  Security
  Northwind

133 % ▾ Results Messages
Select PNAME,DEVELOPIN,SUM(SCOST) SALESCOST from Software
Group by PNAME,DEVELOPIN
Order by PNAME

PNAME DEVELOPIN SALESCOST
1 ANAND BASIC 399.95
2 ANAND PASCAL 7500.00
3 JULIANA COBOL 3000.00
4 KAMALA DBASE 9000.00
5 MARY C 4500.00
6 MARY CPP 300.00
7 MARY ORACLE 18000.00
8 PATRICK CPP 300.00
9 QADIR ASSEMBLY 750.00
10 QADIR C 1900.00
11 RAMESH DBASE 13000.00
12 RAMESH PASCAL 599.95
13 REMITHA ASSEMBLY 2500.00
14 REMITHA C 725.00

Query executed successfully.

```

Ln 150 Col 15 Ch 15 INS

**34. Display each language name with AVG Development Cost, AVG Selling Cost and AVG Price per Copy.**

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (52)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾ Internal_Assgn
LENVO\AGNIS (SQL Server 15.0.2095.3 - Internal_Assgn)
  Databases
    System Databases
    Database Snapshots
    Internal_Assgn
      Tables
        Software
          Columns
            PNAME (varchar(20))
            TITLE (varchar(20), not null)
            DEVELOPIN (varchar(10))
            SCOST (decimal(10,2))
            DCOST (int, null)
            SOLD (int, null)
          Keys
          Constraints
          Triggers
          Indexes
          Statistics
        dbo.studies
      Views
      External Resources
      Synonyms
      Programmability
      Service Broker
      Storage
      Security
    Northwind
  Tables
    System Tables
    FileTables
    External Tables
    Graph Tables
    dbo.programmer
    dbo.software
      Columns
        PNAME (varchar(20))
        TITLE (varchar(20), not null)
        DEVELOPIN (varchar(10))
        SCOST (decimal(10,2))
        DCOST (int, null)
        SOLD (int, null)
      Keys
      Constraints
      Triggers
      Indexes
      Statistics
    dbo.studies
  Views
  External Resources
  Synonyms
  Programmability
  Service Broker
  Storage
  Security
  Northwind

133 % ▾ Results Messages
Select DEVELOPIN,AVG(DCOST) DEV COST, AVG(SCOST) SALESCOST,AVG(SCOST) PRICE_COPY
from Software
Group by DEVELOPIN

DEVELOPIN DEV COST SALESCOST PRICE_COPY
1 ASSEMBLY 4500 1625.000000 399.950000
2 BASIC 6000 399.950000 399.950000
3 C 7200 2006.250000 2006.250000
4 COBOL 3500 3000.000000 3000.000000
5 CPP 1200 300.000000 300.000000
6 DBASE 27500 11000.000000 11000.000000
7 ORACLE 85000 18000.000000 18000.000000
8 PASCAL 31833 3066.650000 3066.650000

Query executed successfully.

```

Ln 154 Col 19 Ch 19 INS

35. Display each programmer's name, costliest and cheapest Packages Developed by him or her.

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (52)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾ Internal_Assgn
LENVOVO\AGNIS (SQL Server 15.0.2095.3 - Internal_Assgn)
Databases
System Databases
Database Snapshots
Internal_Assgn
Tables
System Tables
FileTables
External Tables
Graph Tables
dbo.programmer
dbo.software
Columns
PNAME (varchar(20))
TITLE (varchar(20), n
DEVELOPIN (varchar
SCOST (decimal(10,2
DCOST (int, null)
SOLD (int, null)
Keys
Constraints
Triggers
Indexes
Statistics
dbo.studies
Views
External Resources
Synonyms
Programmability
Service Broker
Storage
Security
Northwind
Ready
SQLhandsON.sql - L... (Lenovo\User (52)) * 13.Oct_22_SubQuer...ql - not connected 07.Oct_22_DDL_DML..I - not connected
Select PNAME,MAX(DCOST) COSTLIES, MIN(SCOST)CHEAPEST
from Software
Group by PNAME
Results Messages
PNAME COSTLIES CHEAPEST
1 ANAND 16000 399.95
2 JULIANA 3500 3000.00
3 KAMALA 20000 8000.00
4 MARY 8500 300.00
5 PATRICK 1200 300.00
6 QADIR 3100 750.00
7 RAMESH 35000 599.95
8 REMITHA 6000 725.00
9 REVATHI 75000 1100.00
10 VIJAYA 700 900.00
Ln 159 Col 15 Ch 15 INS
Query executed successfully.
LENOVO\AGNIS (15.0 RTM) | Lenovo\User (52) | Internal_Assgn | 00:00:00 | 10 rows

```

36. Display each institute name with number of Courses, Average Cost per Course.

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (52)) * Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾ Internal_Assgn
LENVOVO\AGNIS (SQL Server 15.0.2095.3 - Internal_Assgn)
Databases
System Databases
Database Snapshots
Internal_Assgn
Tables
System Tables
FileTables
External Tables
Graph Tables
dbo.programmer
dbo.software
dbo.studies
Columns
PNAME (varchar(20))
INSTITUTE (varchar(20)
COURSE (varchar(20)
COURSE_FEE (int, null)
Keys
Constraints
Triggers
Indexes
Statistics
Views
External Resources
Synonyms
Programmability
Service Broker
Storage
Security
Northwind
Trendz
Security
Ready
SQLhandsON.sql - L... (Lenovo\User (52)) * 13.Oct_22_SubQuer...ql - not connected 07.Oct_22_DDL_DML..I - not connected
from Software
Group by PNAME
Select INSTITUTE, COUNT(COURSE) CCOUNT, AVG(COURSE_FEE) AVCF
FROM STUDIES
GROUP BY INSTITUTE
Results Messages
INSTITUTE CCOUNT AVCF
1 APPLE 1 14000
2 BDPS 3 25333
3 BRILLIANT 1 11000
4 COIT 1 7200
5 PRAGATH 3 5466
6 SABHARI 4 4625
Ln 166 Col 1 Ch 1 INS
Query executed successfully.
LENOVO\AGNIS (15.0 RTM) | Lenovo\User (52) | Internal_Assgn | 00:00:00 | 6 rows

```

**37. Display each institute Name with Number of Students.**

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane contains the following T-SQL query:

```
from Software
Group by PNAME

Select INSTITUTE, COUNT(PNAME) SCOUNT
FROM STUDIES
GROUP BY INSTITUTE
```

The results pane displays the following data:

| INSTITUTE | SCOUNT |
|-----------|--------|
| APPLE     | 1      |
| BODPS     | 3      |
| BRILLIANT | 1      |
| COIT      | 1      |
| PRAGATHI  | 3      |
| SABHARI   | 4      |

At the bottom, a message indicates: "Query executed successfully." and "LENVO\AGNIS (15.0 RTM) | Lenovo\User (S2) | Internal\_Assgn | 00:00:00 | 6 rows".

**38. Display Names of Male and Female Programmers. Gender also.**

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane contains the following T-SQL query:

```
Select PNAME,GENDER FROM PROGRAMMER
```

The results pane displays the following data:

| PNAME   | GENDER |
|---------|--------|
| ANAND   | M      |
| ALTAF   | M      |
| JULIANA | F      |
| KAMALA  | F      |
| MARY    | F      |
| NELSON  | M      |
| PATRICK | M      |
| QADIR   | M      |
| RAMESH  | M      |
| REBECCA | F      |
| REMITHA | F      |
| REVATHI | F      |
| VIJAYA  | F      |

At the bottom, a message indicates: "Query executed successfully." and "LENVO\AGNIS (15.0 RTM) | Lenovo\User (S2) | Internal\_Assgn | 00:00:00 | 13 rows".

### 39. Display the Name of Programmers and Their Packages.

```

SELECT PNAME,GENDER FROM PROGRAMMER
SELECT PNAME,TITLE FROM SOFTWARE
ORDER BY PNAME

```

| PNAME   | TITLE           |
|---------|-----------------|
| ANAND   | PARACHUTES      |
| ANAND   | VIDEO TITLING   |
| JULIANA | INVENTORY       |
| KAMALA  | PAYROLL PKG.    |
| MARY    | FINANCIAL ACCT. |
| MARY    | CODE GENERATOR  |
| MARY    | README          |
| PATRICK | README          |
| QADIR   | BOMBS AWAY      |
| QADIR   | VACCINES        |
| RAMESH  | HOTEL MGMT.     |
| RAMESH  | DEAD LEE        |
| REMITHA | PC UTILITIES    |
| REMITHA | TSR HELP PKG.   |

Query executed successfully.

### 40. Display the Number of Packages in Each Language Except C and C++.

```

SELECT INSTITUTE, COUNT(PNAME) SCOUNT
FROM STUDIES
GROUP BY INSTITUTE

SELECT PNAME,GENDER FROM PROGRAMMER

SELECT DEVELOPIN, COUNT(TITLE) PACKAGECOUNT FROM SOFTWARE
WHERE DEVELOPIN NOT IN ('C','C++)
GROUP BY DEVELOPIN

```

| DEVELOPIN | PACKAGECOUNT |
|-----------|--------------|
| ASSEMBLY  | 2            |
| BASIC     | 1            |
| COBOL     | 1            |
| CPP       | 2            |
| DBASE     | 2            |
| ORACLE    | 1            |
| PASCAL    | 3            |

Query executed successfully.

41. Display the Number of Packages in Each Language for which Development Cost is less than 1000.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left displays the database structure for 'LENOVO\AGNIS (SQL Server 15.0.2095.3)'. The 'Tables' node under 'databases' contains several tables, including 'System Tables', 'FileTables', 'External Tables', 'Graph Tables', 'dbo.programmer', 'dbo.software', 'dbo.studies', and 'dbo.courses'. The 'Programmability' node lists 'Synonyms', 'Triggers', and 'Views'. The 'Security' node lists 'Logins', 'Roles', 'Schemas', 'Users', and 'Certificates'. The 'Results' pane on the right shows the output of two queries:

```
SELECT DEVELOPIN, COUNT(TITLE)PACKAGECOUNT FROM SOFTWARE
WHERE DCOST <1000
GROUP BY DEVELOPIN
```

```
WHERE DEVELOPIN NOT IN ('C','C++')
GROUP BY DEVELOPIN
```

The first query returns one row: C | 1. The second query returns no rows.

42. Display AVG Difference between SCOST, DCOST for Each Package.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left displays the database structure for 'LENOVO\AGNIS'. The central pane shows a query window with the following T-SQL code:

```
SELECT Title, AVG(SCOST-DCOST)DIFF
FROM SOFTWARE
Group by TITLE
```

The results grid below shows the output of the query:

| Title             | (No column name) |
|-------------------|------------------|
| 1 BOMBS AWAY      | 2250.000000      |
| 2 CODE GENERATOR  | -15500.000000    |
| 3 DEAD LEE        | -3900.050000     |
| 4 FINANCIAL ACCT. | -8700.000000     |
| 5 HOSPITAL MGMT.  | -73900.000000    |
| 6 HOTEL MGMT.     | -22000.000000    |
| 7 INVENTORY       | -500.000000      |
| 8 PARACHUTES      | -5600.050000     |
| 9 PAYROLL PKG.    | -11000.000000    |
| 10 PC UTILITIES   | 4275.000000      |
| 11 README         | -900.000000      |
| 12 TSR EDITOR     | 200.000000       |
| 13 TSR HELP PKG.  | -3500.000000     |
| 14 VACCINES       | -1200.000000     |

The status bar at the bottom indicates "Query executed successfully." and "15 rows".

43. Display the total SCOST, DCOST and amount to Be Recovered for each Programmer for Those Whose Cost has not yet been Recovered.

```

SELECT PROFI FROM PROGRAMMER) AND COUNT(PROF2)=1
SELECT DISTINCT(PNAME),SCOST,DCOST,SOLD,((SCOST*SOLD)-DCOST) REVENUE,
FROM SOFTWARE
WHERE DCOST > (SCOST*SOLD)
  
```

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays the query results:

| PNAME   | SCOST    | DCOST | SOLD | REVENUE  | RECOVER   |
|---------|----------|-------|------|----------|-----------|
| JULIANA | 3000.00  | 3500  | 0    | 0.00     | -3500.00  |
| MARY    | 18000.00 | 85000 | 4    | 72000.00 | -13000.00 |
| REVATHI | 1100.00  | 75000 | 2    | 2200.00  | -72800.00 |

At the bottom, a message indicates: "Query executed successfully".

44. Display Highest, Lowest and Average Salaries for those earning more than 2000.

```

WHERE DEVELOPIN NOT IN ('C','C++')
GROUP BY DEVELOPIN
Select MAX(SALARY) HIGH, MIN(SALARY)LOW, AVG (SALARY) AV
FROM PROGRAMMER
WHERE SALARY > 2000
  
```

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays the query results:

| HIGH | LOW  | AV   |
|------|------|------|
| 4500 | 2500 | 3169 |

At the bottom, a message indicates: "Query executed successfully".

#### 45. Who is the Highest Paid C Programmers?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays a query window with the following SQL code:

```
FROM SOFTWARE
Group by TITLE

Select PNAME, SALARY from PROGRAMMER WHERE SALARY=(Select Max(Salary)HighSAL from Programmer
Where prof1 = 'C' or Prof2 = 'C')
```

The results pane shows a single row of data:

| PNAME   | SALARY |
|---------|--------|
| REMITHA | 3600   |

At the bottom, a message indicates: "Query executed successfully."

#### 46. Who is the Highest Paid Female COBOL Programmer?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays a query window with the following SQL code:

```
WHERE SALARY > 2000

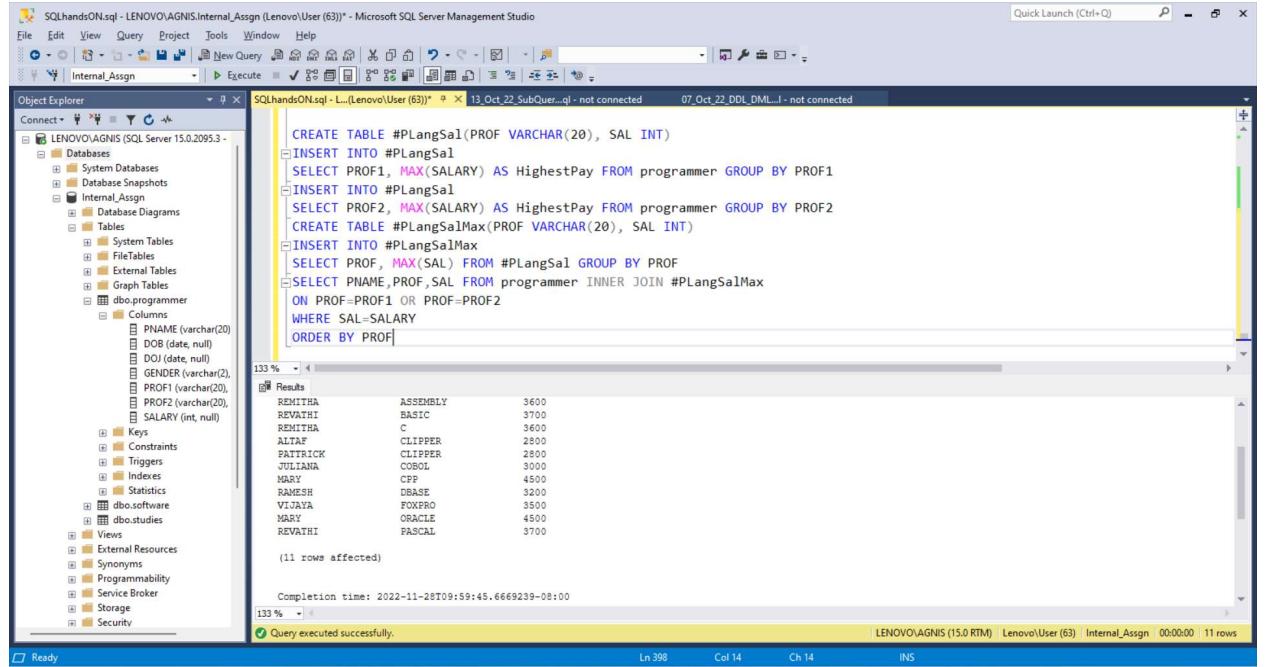
Select PNAME, SALARY from PROGRAMMER WHERE SALARY=(Select Max(Salary)HighSAL from Programmer
Where prof1 = 'COBOL' or Prof2 = 'COBOL') AND GENDER = 'F'
```

The results pane shows a single row of data:

| PNAME   | SALARY |
|---------|--------|
| JULIANA | 3000   |

At the bottom, a message indicates: "Query executed successfully."

47. Display the names of the highest paid programmers for each Language.



```

CREATE TABLE #PLangSal(PROF VARCHAR(20), SAL INT)
INSERT INTO #PLangSal
SELECT PROF1, MAX(SALARY) AS HighestPay FROM programmer GROUP BY PROF1
INSERT INTO #PLangSal
SELECT PROF2, MAX(SALARY) AS HighestPay FROM programmer GROUP BY PROF2
CREATE TABLE #PLangSalMax(PROF VARCHAR(20), SAL INT)
INSERT INTO #PLangSalMax
SELECT PROF, MAX(SAL) FROM #PLangSal GROUP BY PROF
SELECT PNAME, PROF, SAL FROM programmer INNER JOIN #PLangSalMax
ON PROF=PROF1 OR PROF=PROF2
WHERE SAL=SALARY
ORDER BY PROF
    
```

Results

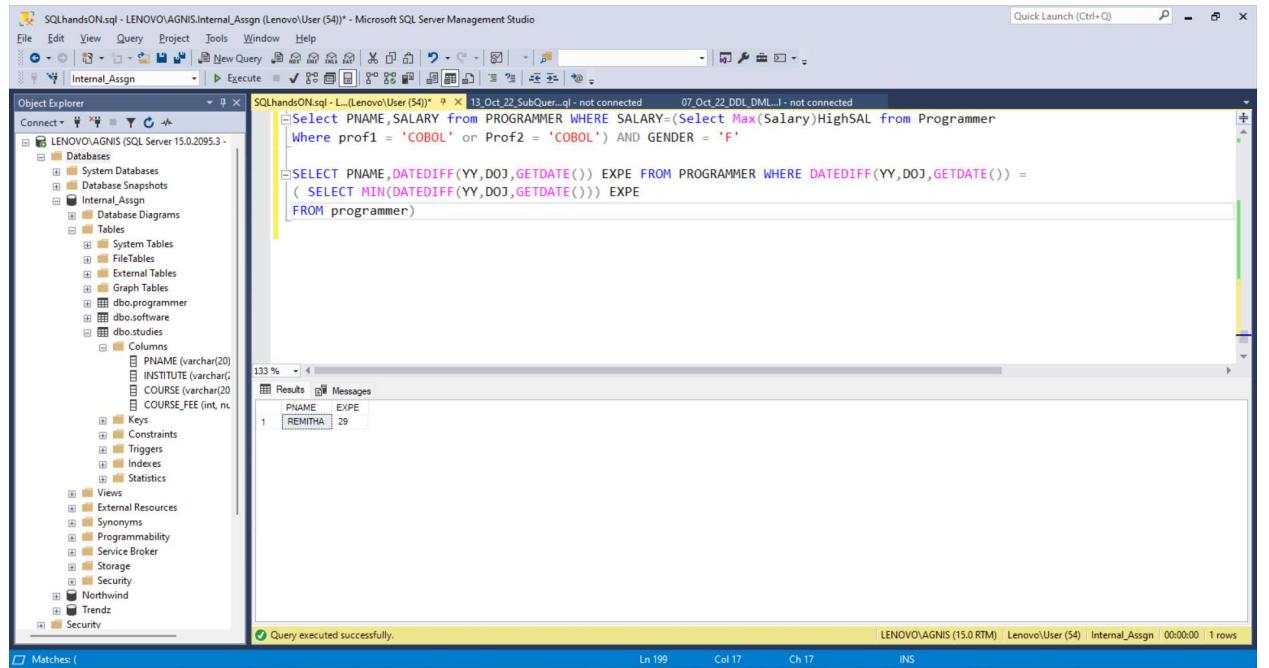
| PNAME   | ASSEMBLY | 3600 |
|---------|----------|------|
| REMITRA | BASIC    | 3700 |
| REMITRA | C        | 3600 |
| ALTAF   | CLIPPER  | 2800 |
| PATRICK | CLIPPER  | 2800 |
| JULIANA | COBOL    | 3000 |
| MARS    | CFP      | 4500 |
| RAJESH  | DBASE    | 3200 |
| VIDYA   | FOXPRO   | 3500 |
| MARY    | ORACLE   | 4500 |
| REVATHI | PASCAL   | 3700 |

(11 rows affected)

Completion time: 2022-11-28T09:59:45.6669239-08:00

Query executed successfully.

48. Who is the least experienced Programmer.



```

SELECT PNAME, SALARY FROM PROGRAMMER WHERE SALARY=(SELECT Max(Salary)HighSAL from Programmer
Where prof1 = 'COBOL' or Prof2 = 'COBOL') AND GENDER = 'F'

SELECT PNAME, DATEDIFF(YY,DOJ,GETDATE()) EXPE FROM PROGRAMMER WHERE DATEDIFF(YY,DOJ,GETDATE()) =
(SELECT MIN(DATEDIFF(YY,DOJ,GETDATE())) EXPE
FROM programmer)
    
```

Results

| PNAME   | EXPE |
|---------|------|
| REMITRA | 29   |

Query executed successfully.

49. Who is the most experienced male programmer knowing PASCAL.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a database named 'LENOVO\AGNIS'. The central pane displays a T-SQL query:

```

SELECT PNAME, DATEDIFF(YY,DOJ,GETDATE()) EXPE
FROM PROGRAMMER
WHERE DATEDIFF(YY,DOJ,GETDATE()) =
    ( SELECT MIN(DATEDIFF(YY,DOJ,GETDATE())) EXPE
      FROM programmer )
    OR
SELECT PNAME, DATEDIFF(YY,DOJ,GETDATE()) EXPE
FROM PROGRAMMER
WHERE DATEDIFF(YY,DOJ,GETDATE()) =
    ( SELECT MAX(DATEDIFF(YY,DOJ,GETDATE())) EXPE
      FROM programmer )
    AND PROF1 = 'PASCAL' OR PROF2 = 'PASCAL'
  
```

The Results pane shows the output:

| PNAME   | EXPE |
|---------|------|
| ALTAF   | 32   |
| JULIANA | 32   |
| PATRICK | 32   |
| REBECCA | 32   |

Message bar at the bottom: 'Query executed successfully.'

50. Which Language is known by only one Programmer?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a database named 'LENOVO\AGNIS'. The central pane displays a T-SQL query:

```

SELECT MAX(DATEDIFF(YY,DOJ,GETDATE())) EXPE
FROM programmer
WHERE PROF1 = 'PASCAL' OR PROF2 = 'PASCAL'

SELECT PROF1 FROM PROGRAMMER
GROUP BY PROF1 HAVING PROF1 NOT IN
    (SELECT PROF2 FROM PROGRAMMER) AND
    COUNT(PROF1)=1 UNION SELECT PROF2 FROM PROGRAMMER
GROUP BY PROF2 HAVING PROF2 NOT IN
    (SELECT PROF1 FROM PROGRAMMER) AND COUNT(PROF2)=1
  
```

The Results pane shows the output:

| PROF1  |
|--------|
| CPP    |
| FOXPRO |
| ORACLE |

Message bar at the bottom: 'Query executed successfully.'

## 51. Who is the Above Programmer Referred in 50?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays a complex SQL query:

```
SELECT PNAME FROM PROGRAMMER WHERE PROF1 IN (SELECT PROF1 FROM PROGRAMMER GROUP BY PROF1 HAVING PROF1 NOT IN (SELECT PROF2 FROM PROGRAMMER) AND COUNT(PROF1)=1 UNION SELECT PROF2 FROM PROGRAMMER GROUP BY PROF2 HAVING PROF2 NOT IN (SELECT PROF1 FROM PROGRAMMER) AND COUNT(PROF2)=1) UNION SELECT PROF2 FROM PROGRAMMER GROUP BY PROF2 HAVING PROF2 NOT IN (SELECT PROF1 FROM PROGRAMMER) AND COUNT(PROF2)=1
```

The results pane shows two rows of data:

| PNAME  |
|--------|
| MARY   |
| VIJAYA |

At the bottom, a message indicates: "Query executed successfully." with status "Ln 221 Col 36 Ch 36 INS".

## 52. Who is the Youngest Programmer knowing DBASE?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays a query:

```
SELECT PNAME FROM PROGRAMMER WHERE DATEDIFF(YY,DOB,GETDATE()) = (SELECT MIN(DATEDIFF(YY,DOB,GETDATE())) ) AGE FROM programmer WHERE PROF1 = 'DBASE' OR PROF2 = 'DBASE'
```

The results pane shows one row of data:

| PNAME  |
|--------|
| NELSON |

Below the results, it says "(1 row affected)". At the bottom, a message indicates: "Completion time: 2022-11-18T11:40:35.2058860-08:00" and "Query executed successfully." with status "Ln 4 Col 1 Ch 1 INS".

53. Which Female Programmer earning more than 3000 does not know C, C++, ORACLE or DBASE?

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (75)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect -> Internal_Assgn
LENVOVO\AGNIS (SQL Server 15.0.2095.3 - Internal_Assgn
  Databases
    System Databases
    Database Snapshots
    Internal_Assgn
      Database Diagrams
      Tables
        System Tables
        FileTables
        External Tables
        Graph Tables
        dbo.programmer
          Columns
          Keys
          Constraints
          Triggers
          Indexes
          Statistics
        dbo.software
          Columns
            PNAME (varchar(20))
            TITLE (varchar(20), n
            DEVELOPIN (varchar
            SCOST (decimal(10,
            DCOST (int, null
            SOLD (int, null
          Keys
          Constraints
          Triggers
          Indexes
          Statistics
        dbo.studies
        Views
        External Resources
  Views
  External Resources

SQLhandsON.sql - L... (Lenovo\User (75)) * 13_Oct_22_SubQuery...ql - not connected 07_Oct_22_DDL_DML...l - not connected
FROM programmer
WHERE PROF1 = 'DBASE' OR PROF2 = 'DBASE'

SELECT PNAME FROM PROGRAMMER
WHERE SALARY > 3000 AND
GENDER = 'F' AND
PROF1 NOT IN ('C', 'C++', 'ORACLE', 'DBASE') AND
PROF2 NOT IN ('C', 'C++', 'ORACLE', 'DBASE')

Results
PNAME
REVATHI
(1 row affected)

Completion time: 2022-11-18T11:54:37.0572727-08:00

Query executed successfully.

```

54. Which Institute has most number of Students?

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (75)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect -> Internal_Assgn
LENVOVO\AGNIS (SQL Server 15.0.2095.3 - Internal_Assgn
  Databases
    System Databases
    Database Snapshots
    Internal_Assgn
      Database Diagrams
      Tables
        System Tables
        FileTables
        External Tables
        Graph Tables
        dbo.programmer
          Columns
          Keys
          Constraints
          Triggers
          Indexes
          Statistics
        dbo.software
        dbo.studies
        Views
        External Resources
        Synonyms
        Programmability
        Service Broker
        Storage
        Security
      Northwind
      Trendz
      Security
      Server Objects
      Replication
      PolyBase
      Always On High Availability

SQLhandsON.sql - L... (Lenovo\User (75)) * 13_Oct_22_SubQuery...ql - not connected 07_Oct_22_DDL_DML...l - not connected
PROF1 NOT IN ('C', 'C++', 'ORACLE', 'DBASE') AND
PROF2 NOT IN ('C', 'C++', 'ORACLE', 'DBASE')

Select INSTITUTE, COUNT(PNAME)
FROM STUDIES
GROUP BY INSTITUTE

Results
INSTITUTE
APPLE      1
BDPS       3
BRILLIANT  1
COIT       1
PRAGATHI   3
SABARI    4
(6 rows affected)

Completion time: 2022-11-18T12:08:49.8417470-08:00

Query executed successfully.

```

## 55. What is the Costliest course?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays a query window with the following SQL code:

```
SELECT MAX(COURSE_FEE)
FROM STUDIES
```

The results pane shows the output of the query:

| COURSE_FEE |
|------------|
| 48000      |

(1 row affected)

Completion time: 2022-11-18T12:09:47.2804823-08:00

At the bottom, a message indicates the query was executed successfully.

## 56. Which course has been done by the most of the Students?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays a query window with the following SQL code:

```
SELECT TOP 1 COURSE, COUNT(PNAME) COURSECNT
FROM STUDIES
GROUP BY COURSE
ORDER BY COUNT(PNAME) DESC
```

The results pane shows the output of the query:

| COURSE | COURSECNT |
|--------|-----------|
| DCA    | 3         |

(1 row affected)

Completion time: 2022-11-18T12:15:42.5847416-08:00

At the bottom, a message indicates the query was executed successfully.

57. Which Institute conducts costliest course.

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (75)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾ Internal_Assgn
LENVOVO\AGNIS (SQL Server 15.0.2095.3 -)
Databases
System Databases
Database Snapshots
Internal_Assgn
Tables
System Tables
FileTables
External Tables
Graph Tables
dbo.programmer
Columns
Keys
Constraints
Triggers
Indexes
Statistics
dbo.software
dbo.studies
Views
External Resources
Synonyms
Programmability
Service Broker
Storage
Security
Northwind
Trendz
Security
Server Objects
Replication
PolyBase
Always On High Availability
Ready

SQLhandsON.sql - L... (Lenovo\User (75)) * 13_Oct_22_SubQuer...ql - not connected 07_Oct_22_DDL_DML..l - not connected
FROM STUDIES
GROUP BY COURSE
ORDER BY COUNT(PNAME) DESC

SELECT INSTITUTE, COURSE_FEE FROM STUDIES WHERE COURSE_FEE =
(SELECT MAX(COURSE_FEE) FROM STUDIES)

133 % ↻
Results
INSTITUTE COURSE_FEE
BDFS 48000
(1 row affected)

Completion time: 2022-11-18T12:22:58.8267322-08:00
Ln 256 Col 38 Ch 38 INS
Query executed successfully.
LENOVO\AGNIS (15.0 RTM) | Lenovo\User (75) | Internal_Assgn | 00:00:00 | 1 rows

```

58. Display the name of the Institute and Course, which has below AVG course fee.

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (63)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾ Internal_Assgn
LENVOVO\AGNIS (SQL Server 15.0.2095.3 -)
Databases
System Databases
Database Snapshots
Internal_Assgn
Tables
System Tables
FileTables
External Tables
Graph Tables
dbo.programmer
Columns
PNAME (varchar(20))
DOB (date, null)
DOI (date, null)
GENDER (varchar(2),
PROF1 (varchar(20),
PROF2 (varchar(20),
SALARY (int, null)
Keys
Constraints
Triggers
Indexes
Statistics
dbo.software
dbo.studies
Views
External Resources
Synonyms
Programmability
Service Broker
Storage
Security
Ready

SQLhandsON.sql - L... (Lenovo\User (63)) * 13_Oct_22_SubQuer...ql - not connected 07_Oct_22_DDL_DML..l - not connected
ORDER BY PROF1

SELECT INSTITUTE, COURSE, COURSE_FEE FROM STUDIES
WHERE COURSE_FEE < (SELECT AVG(COURSE_FEE) FROM STUDIES)

133 % ↻
Results
INSTITUTE COURSE COURSE_FEE
SABHARI PGDCA 4500
COIT DCA 7200
PRAGATHI DCA 5000
SABHARI PGDCA 4500
PRAGATHI DAP 6200
PRAGATHI DCAP 5200
SABHARI PGDCA 4500
BRILLIANT DCAP 11000
BDFS DCS 6000
SABHARI DAP 5000
(10 rows affected)

133 % ↻
Query executed successfully.
Ln 401 Col 56 Ch 56 INS
LENOVO\AGNIS (15.0 RTM) | Lenovo\User (63) | Internal_Assgn | 00:00:00 | 10 rows

```

59. Display the names of the courses whose fees are within 1000 (+ or -) of the Average Fee,

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane contains a query window with the following SQL code:

```
SELECT COURSE, COURSE_FEE FROM studies WHERE COURSE_FEE < (SELECT AVG(COURSE_FEE) FROM Studies) AND COURSE_FEE > (SELECT AVG(COURSE_FEE) - 1000 FROM STUDIES)
```

The results pane displays one row of data:

| COURSE | COURSE_FEE |
|--------|------------|
| DCAP   | 11000      |

Completion time: 2022-11-28T10:07:24.7251919-08:00

Query executed successfully.

60. Which package has the Highest Development cost?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane contains a query window with the following SQL code:

```
SELECT TITLE, DCOST FROM SOFTWARE WHERE DCOST = (SELECT MAX(DCOST) FROM SOFTWARE)
```

The results pane displays one row of data:

| TITLE           | DCOST |
|-----------------|-------|
| FINANCIAL ACCT. | 85000 |

Completion time: 2022-11-18T12:25:29.0597692-08:00

Query executed successfully.

61. Which course has below AVG number of Students?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a database named 'LENOVO\AGNIS'. The central pane displays a T-SQL query:

```
CREATE TABLE #AVGCNT (CRS VARCHAR(20), CNT INT)
INSERT INTO #AVGCNT
SELECT COURSE, COUNT(PNAME) FROM STUDIES GROUP BY COURSE
SELECT CRS,CNT FROM #AVGCNT WHERE CNT <=
(SELECT AVG(CNT) FROM #AVGCNT)
```

The results pane shows the output of the query:

| CRS  | CNT |
|------|-----|
| DCS  | 1   |
| HDDA | 1   |
| MCA  | 1   |

Completion time: 2022-11-28T10:14:21.0715524-08:00

Query executed successfully.

62. Which Package has the lowest selling cost?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a database named 'LENOVO\AGNIS'. The central pane displays a T-SQL query:

```
SELECT TITLE, DCOST FROM SOFTWARE WHERE DCOST =
(SELECT MAX(DCOST) FROM SOFTWARE)

SELECT DISTINCT(TITLE), SCOST FROM SOFTWARE WHERE SCOST =
(SELECT MIN(SCOST) MSC FROM SOFTWARE)
```

The results pane shows the output of the query:

| TITLE  | SCOST  |
|--------|--------|
| README | 300.00 |

Completion time: 2022-11-18T12:34:36.6714578-08:00

Query executed successfully.

63. Who Developed the Package that has sold the least number of copies?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The main window displays a query results grid. The query executed was:

```
SELECT PNAME, TITLE, SCOST, SOLD FROM SOFTWARE WHERE SOLD = (SELECT MIN(SOLD) MSOLD FROM SOFTWARE)
```

The results show one row:

| PNAME   | TITLE     | SCOST   | SOLD |
|---------|-----------|---------|------|
| JULIANA | INVENTORY | 3000.00 | 0    |

(1 row affected)

Completion time: 2022-11-18T12:35:50.7625775-08:00

Query executed successfully.

64. Which language has used to develop the package, which has the highest sales amount?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The main window displays a query results grid. The query executed was:

```
SELECT PNAME, TITLE, DEVELOPIN, SOLD FROM SOFTWARE WHERE SOLD = (SELECT MAX(SOLD) FROM SOFTWARE)
```

The results show two rows:

| PNAME   | TITLE  | DEVELOPIN | SOLD |
|---------|--------|-----------|------|
| MARY    | README | CPF       | 84   |
| PATRICK | README | CPF       | 84   |

(2 rows affected)

Completion time: 2022-11-18T12:45:24.3442773-08:00

Query executed successfully.

65. How many copies of package that has the least difference between development and selling cost where sold.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure, including the Internal\_Assgn database. The central pane displays a query results window for the following SQL code:

```

SELECT SOLD,TITLE FROM SOFTWARE WHERE TITLE =
(SELECT TITLE FROM SOFTWARE WHERE (DCOST-SCOST)=
(SELECT MIN(DCOST-SCOST) FROM SOFTWARE))

```

The results show one row:

| SOLD | TITLE      |
|------|------------|
| 6    | TSR EDITOR |

(1 row affected)

Completion time: 2022-11-18T23:11:46.8275167-08:00

At the bottom, a green status bar indicates "Query executed successfully".

66. Which is the costliest package developed in PASCAL.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure, including the Internal\_Assgn database. The central pane displays a query results window for the following SQL code:

```

SELECT PNAME,TITLE,DEVELOPIN,SOLD FROM SOFTWARE
WHERE SOLD = (SELECT MAX(SOLD) FROM SOFTWARE)

SELECT TITLE,SCOST FROM SOFTWARE WHERE SCOST =
(SELECT MAX(SCOST) FROM SOFTWARE
WHERE DEVELOPIN = 'PASCAL')

```

The results show one row:

| TITLE         | SCOST   |
|---------------|---------|
| VIDEO TITLING | 7500.00 |

(1 row affected)

Completion time: 2022-11-18T12:48:00.3463649-08:00

At the bottom, a green status bar indicates "Query executed successfully".

67. Which language was used to develop the most number of Packages.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a database named 'Internal\_Assgn'. The main pane displays a query results window for a query that counts packages developed by 'PASCAL'.

```
SELECT TOP 1 DEVELOPIN, COUNT(TITLE) CT FROM SOFTWARE
GROUP BY DEVELOPIN ORDER BY COUNT(TITLE) DESC
```

| DEVELOPIN | CT |
|-----------|----|
| C         | 4  |

(1 row affected)

Completion time: 2022-11-18T12:51:10.4015615-08:00

Query executed successfully.

68. Which programmer has developed the highest number of Packages?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a database named 'Internal\_Assgn'. The main pane displays a query results window for a query that counts packages developed by 'MARY'.

```
SELECT TOP 1 PNAME, COUNT(TITLE) CT FROM SOFTWARE
GROUP BY PNAME ORDER BY COUNT(TITLE) DESC
```

| PNAME | CT |
|-------|----|
| MARY  | 3  |

(1 row affected)

Completion time: 2022-11-18T12:51:48.2738729-08:00

Query executed successfully.

## 69. Who is the Author of the Costliest Package?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays a query window with the following SQL code:

```
(SELECT MIN(DCOST-SCOST) FROM SOFTWARE)
SELECT PNAME, SCOST FROM SOFTWARE WHERE SCOST =
([Select MAX(SCOST) FROM SOFTWARE])
```

The results pane shows the output of the query:

| PNAME | SCOST    |
|-------|----------|
| MARY  | 18000.00 |

(1 row affected)

Completion time: 2022-11-18T23:14:10.6636598-08:00

At the bottom, a message indicates the query was executed successfully.

## 70. Display the names of the packages, which have sold less than the AVG number of copies.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays a query window with the following SQL code:

```
(Select MAX(SCOST) FROM SOFTWARE)
SELECT TITLE,SOLD FROM SOFTWARE WHERE SOLD <
([Select AVG (SOLD) FROM SOFTWARE])
```

The results pane shows the output of the query:

| TITLE           | SOLD |
|-----------------|------|
| VIDEO TITLING   | 9    |
| INVENTORY       | 0    |
| PAYROLL PKG.    | 7    |
| FINANCIAL ACCT. | 4    |
| CODE GENERATOR  | 23   |
| BOMBS AWAY      | 11   |
| VACCINES        | 21   |
| HOTEL MGMT.     | 4    |
| TSR HELP PKG.   | 7    |
| HOSPITAL MGMT.  | 2    |
| TSR EDITOR      | 6    |

(11 rows affected)

Completion time: 2022-11-18T23:27:08.9780840-08:00

At the bottom, a message indicates the query was executed successfully.

**71. Who are the authors of the Packages, which have recovered more than double the Development cost?**

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Asgn (Lenovo\User (65)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾ Databases Internal_Asgn
  ▾ Tables
    ▾ System Tables
      ▾ FileTables
      ▾ External Tables
      ▾ Graph Tables
    ▾ dbo.programmer
      ▾ Columns
      ▾ Keys
      ▾ Constraints
      ▾ Triggers
      ▾ Indexes
      ▾ Statistics
    ▾ dbo.software
      ▾ Views
      ▾ External Resources
      ▾ Synonyms
      ▾ Programmability
      ▾ Service Broker
      ▾ Storage
      ▾ Security
    ▾ Northwind
    ▾ Trendz
    ▾ Security
    ▾ Server Objects
    ▾ Replication
    ▾ PolyBase
    ▾ Always On High Availability
13. Oct_22_SubQuery_ql - not connected
07.Oct_22_DDL_DML_I - not connected
Select MAX(SCOST) FROM SOFTWARE
SELECT TITLE,SOLD FROM SOFTWARE WHERE SOLD <
(Select AVG (SOLD) FROM SOFTWARE)
SELECT TITLE,(SCOST-SOLD) REV,DCOST FROM SOFTWARE
WHERE SCOST-SOLD > (DCOST*2)

Results
TITLE REV DCOST
----- -----
README 25200.00 1200
PARACHUTES 17197.85 6000
VIDEO TITLING 6700.00 16000
PAYROLL PKG. 63000.00 20000
CODE GENERATOR 103500.00 20000
README 25200.00 1200
BOMBS AWAY 8250.00 3000
VACCINES 39900.00 3100
DEAD LEE 43796.35 4500
PC UTILITIES 36975.00 5000
TSR HELP PKG. 17500.00 6000
TSR EDITOR 5400.00 700
(12 rows affected)
133 % ▾
Query executed successfully.
LENOVO\AGNIS (15.0 RTM) | Lenovo\User (65) | Internal_Asgn | 00:00:00 | 12 rows
Ln 285 Col 29 Ch 29 INS
Ready

```

**72. Display the programmer Name and the cheapest packages developed by them in each language.**

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Asgn (Lenovo\User (51)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾ Databases Internal_Asgn
  ▾ Tables
    ▾ System Tables
      ▾ FileTables
      ▾ External Tables
      ▾ Graph Tables
    ▾ dbo.programmer
      ▾ Columns
      ▾ Keys
      ▾ Constraints
      ▾ Triggers
      ▾ Indexes
      ▾ Statistics
    ▾ dbo.software
      ▾ Views
      ▾ External Resources
      ▾ Synonyms
      ▾ Programmability
      ▾ Service Broker
      ▾ Storage
      ▾ Security
    ▾ Northwind
    ▾ Trendz
    ▾ Security
    ▾ Server Objects
    ▾ Replication
    ▾ PolyBase
    ▾ Always On High Availability
13. Oct_22_SubQuery_ql - not connected
07.Oct_22_DDL_DML_I - not connected
WHERE SCOST-SOLD > (DCOST*2)

SELECT PNAME,TITLE FROM SOFTWARE WHERE DCOST IN
(SELECT MIN(DCOST) FROM SOFTWARE GROUP BY DEVELOPIN)

Results
PNAME TITLE
----- -----
MARY README
ANDREW PARACHUTES
JULIANA INVENTORY
KOMALA PAYROLL PKG.
MARY FINANCIAL ACCT.
MARY CODE GENERATOR
PATRICK README
QADIR BOMBS AWAY
RAMESH DEAD LEE
RENITHA TSR HELP PKG.
VIJAYA TSR EDITOR
(11 rows affected)
133 % ▾
Query executed successfully.
LENOVO\AGNIS (15.0 RTM) | Lenovo\User (51) | Internal_Asgn | 00:00:00 | 11 rows
Ln 290 Col 1 Ch 1 INS
Ready

```

73. Display the language used by each programmer to develop the Highest Selling and Lowest-selling package.

```

SELECT PNAME, DEVELOPIN FROM SOFTWARE WHERE SOLD IN
(SELECT MAX(SOLD) FROM SOFTWARE GROUP BY PNAME)
UNION SELECT PNAME, DEVELOPIN FROM SOFTWARE
WHERE SOLD IN (SELECT MIN(SOLD) FROM SOFTWARE GROUP BY PNAME)
    
```

| PNAME   | DEVELOPIN |
|---------|-----------|
| ANAND   | BASIC     |
| AMIT    | PASCAL    |
| JULIANA | COBOL     |
| KOMALA  | BASE      |
| MARY    | CFP       |
| MARY    | ORACLE    |
| PATRICK | CFP       |
| QADIR   | ASSEMBLY  |
| QADIR   | C         |
| RAMESH  | DBASE     |
| RAMESH  | PASCAL    |
| REMITRA | ASSEMBLY  |
| REMITRA | C         |
| REVATHI | PASCAL    |

Query executed successfully.

74. Who is the youngest male Programmer born in 1965?

```

SELECT PNAME, DOB FROM programmer WHERE DATEDIFF(DD,DOB,GETDATE())=
(SELECT MIN(DATEDIFF(DD,DOB,GETDATE())) FROM Programmer WHERE year(DOB)=1965 AND GENDER='M')
    
```

| PNAME   | DOB        |
|---------|------------|
| PATRICK | 1965-11-10 |

(1 row affected)

Completion time: 2022-11-28T10:19:45.4797504-08:00

Query executed successfully.

75. Who is the oldest Female Programmer who joined in 1992?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays the following SQL query and its results:

```
SELECT PNAME,DOB,YEAR(DOJ) FROM Programmer WHERE DATEDIFF(DD,DOB,GETDATE())=(SELECT MAX(DATEDIFF(DD,DOB,GETDATE())) FROM Programmer WHERE YEAR(DOJ) ='1992');
```

The results show one row:

| PNAME  | DOB             |
|--------|-----------------|
| VIJAYA | 1965-12-14 1992 |

(1 row affected)

Completion time: 2022-11-28T10:20:21.3752130-08:00

Query executed successfully.

76. In which year was the most number of Programmers born.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays the following SQL query and its results:

```
CREATE TABLE #TEMP (YOB INT, CNT INT)
INSERT INTO #TEMP
SELECT YEAR(DOB),COUNT(YEAR(DOB)) FROM programmer GROUP BY YEAR(DOB)
SELECT YOB, CNT FROM #TEMP WHERE CNT= (SELECT MAX(CNT) FROM #TEMP)
```

The results show one row:

| YOB  | CNT |
|------|-----|
| 1965 | 3   |

(1 row affected)

Completion time: 2022-11-28T10:22:18.9846352-08:00

Query executed successfully.

77. In which month did most number of programmers join?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays a T-SQL script:

```
CREATE TABLE #MOJ (MOJ INT, CNT INT)
INSERT INTO #MOJ
SELECT MONTH(DOJ), COUNT(MONTH(DOJ)) FROM programmer GROUP BY MONTH(DOJ)
SELECT MOJ, CNT FROM #MOJ WHERE CNT= (SELECT MAX(CNT) FROM #MOJ)
```

The 'Results' pane shows the output:

| MOJ | CNT |
|-----|-----|
| 4   | 5   |

Completion time: 2022-11-28T10:24:30.7596180-08:00

Query executed successfully.

78. In which language are most of the programmer's proficient.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays a T-SQL script:

```
SELECT MONTH(DOJ), COUNT(MONTH(DOJ)) FROM programmer GROUP BY MONTH(DOJ)
SELECT MOJ, CNT FROM #MOJ WHERE CNT= (SELECT MAX(CNT) FROM #MOJ)

CREATE TABLE #PCNT (PR VARCHAR(20), CNT INT)
CREATE TABLE #PsCNT (PRs VARCHAR(20), sCNT INT)
INSERT INTO #PCNT
SELECT PROF1, COUNT(PROF1) FROM programmer GROUP BY PROF1 UNION ALL
SELECT PROF2, COUNT(PROF2) FROM programmer GROUP BY PROF2
INSERT INTO #PsCNT
SELECT PR, SUM(CNT) FROM #PCNT GROUP BY PR

SELECT PRs, sCNT FROM #PsCNT WHERE sCNT =
(SELECT MAX(sCNT) FROM #PsCNT)
```

The 'Results' pane shows the output:

| PRs    | sCNT |
|--------|------|
| C      | 4    |
| COBOL  | 4    |
| DBASE  | 4    |
| PASCAL | 4    |

Completion time: 2022-11-28T10:25:40.1715958-08:00

Query executed successfully.

79. Who are the male programmers earning below the AVG salary of Female Programmers?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays the following SQL query:

```
SELECT PNAME FROM PROGRAMMER WHERE GENDER = 'M' AND SALARY < (SELECT(AVG(SALARY))FROM PROGRAMMER WHERE GENDER = 'F')
```

The results pane shows the following output:

| PNAME   |
|---------|
| ANAND   |
| ALTAF   |
| NELSON  |
| PATRICK |
| QADIR   |
| RAMESH  |

(6 rows affected)

Completion time: 2022-11-19T12:24:02.2249068-08:00

Query executed successfully.

80. Who are the Female Programmers earning more than the Highest Paid?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane displays the following SQL query:

```
SELECT PNAME FROM PROGRAMMER WHERE GENDER = 'F' AND SALARY > (SELECT(MAX(SALARY))FROM PROGRAMMER WHERE GENDER = 'M')
```

The results pane shows the following output:

| PNAME   |
|---------|
| MARY    |
| REMITHA |
| REVATHI |
| VIJAYA  |

(4 rows affected)

Completion time: 2022-11-19T12:25:19.8617680-08:00

Query executed successfully.

81. Which language has been stated as the proficiency by most of the Programmers?

82. Display the details of those who are drawing the same salary.

The screenshot shows the Microsoft SQL Server Management Studio interface. The title bar reads "SQLhandsON.sql - LENOVO\AGNIS.Internal\_Asgn (Lenovo\User (51)) - Microsoft SQL Server Management Studio". The Object Explorer on the left shows the database structure, including the "Internal\_Asgn" database and its tables like "programmer". The main window displays a query in the center pane:

```
select PNAME, salary from programmer where salary = any
(select salary from programmer p group by salary
having salary=p.salary and count(*)>1)
```

The results pane below shows the output of the query:

| PNAME   | salary |
|---------|--------|
| ANAND   | 3200   |
| ALTAF   | 2000   |
| JULIANA | 3000   |
| NELSON  | 2500   |
| PATRICK | 2800   |
| QADIR   | 3000   |
| RAMESH  | 3200   |
| REBECCA | 2500   |

(8 rows affected)

Completion time: 2022-11-19T12:31:01.9657944-08:00

At the bottom, a message says "Query executed successfully."

83. Display the details of the Software Developed by the Male Programmers Earning More than

3000/-.

The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer, the 'Programmer' table under the 'Internal\_Asgn' database is selected. In the main pane, a query is run:

```
select * from programmer  
where salary>3000 and GENDER='m'
```

The results show two rows:

| PNAME  | DOB        | DOJ        | GENDER | PROF1  | PROF2 | SALARY |
|--------|------------|------------|--------|--------|-------|--------|
| ANAND  | 1966-04-12 | 1992-04-21 | M      | PASCAL | BASIC | 3200   |
| RAMESH | 1967-05-03 | 1991-02-28 | M      | PASCAL | DBASE | 3200   |

(2 rows affected)

Completion time: 2022-11-19T12:36:02.027925467-08:00

Query executed successfully.

#### 84. Display the details of the packages developed in Pascal by the Female Programmers.

The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer, the 'Programmer' and 'Software' tables under the 'Internal\_Asgn' database are selected. A join query is run:

```
select S.* from Programmer P join Software S  
ON P.PNAME = S.PNAME Where GENDER='F' and developin='pascal'
```

The results show one row:

| PNAME   | TITLE          | DEVELOPIN | SCOST   | DCOST | SOLD |
|---------|----------------|-----------|---------|-------|------|
| REVATHI | HOSPITAL MGMT. | PASCAL    | 1100.00 | 75000 | 2    |

(1 row affected)

Completion time: 2022-11-19T12:50:00.03952653-08:00

Query executed successfully.

85. Display the details of the Programmers who joined before 1990.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The main window contains a query editor with the following SQL code:

```
SELECT * FROM Programmer WHERE YEAR(DOJ)<1990;
```

The results pane displays the output of the query:

| PNAME  | DOB        | DOJ        | GENDER | PROF1 | PROF2 | SALARY |
|--------|------------|------------|--------|-------|-------|--------|
| NELSON | 1985-09-11 | 1989-10-11 | M      | COBOL | DBASE | 2500   |

(1 row affected)

Completion time: 2022-11-28T10:29:06.1502325-08:00

Query executed successfully.

86. Display the details of the Software Developed in C By female programmers of Pragathi.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The main window contains a query editor with the following SQL code:

```
select s.* from software s JOIN studies st ON S.PNAME = ST.PNAME
JOIN programmer p ON P.PNAME = S.PNAME WHERE GENDER = 'F' and
INSTITUTE = 'PRAGATHI' AND DEVELOPIN = 'C'
```

The results pane displays the output of the query:

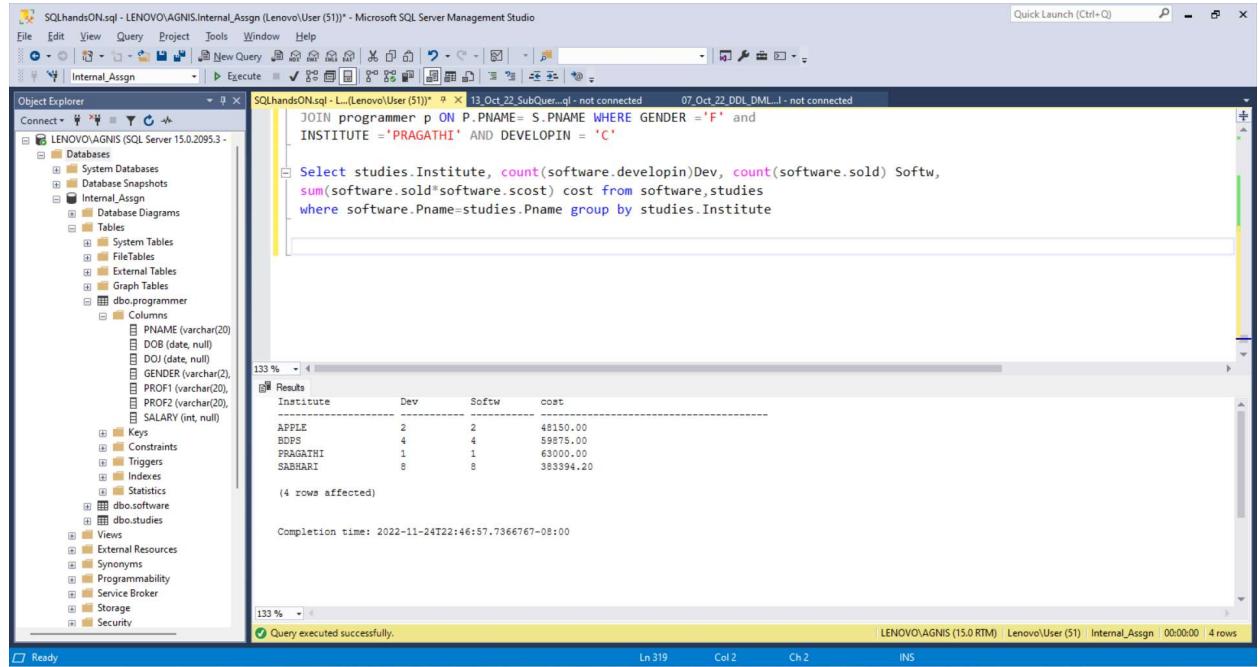
| PNAME | TITLE | DEVELOPIN | SCOST | DCOST | SOLD |
|-------|-------|-----------|-------|-------|------|
|       |       |           |       |       |      |

(0 rows affected)

Completion time: 2022-11-19T12:55:59.1431124-08:00

Query executed successfully.

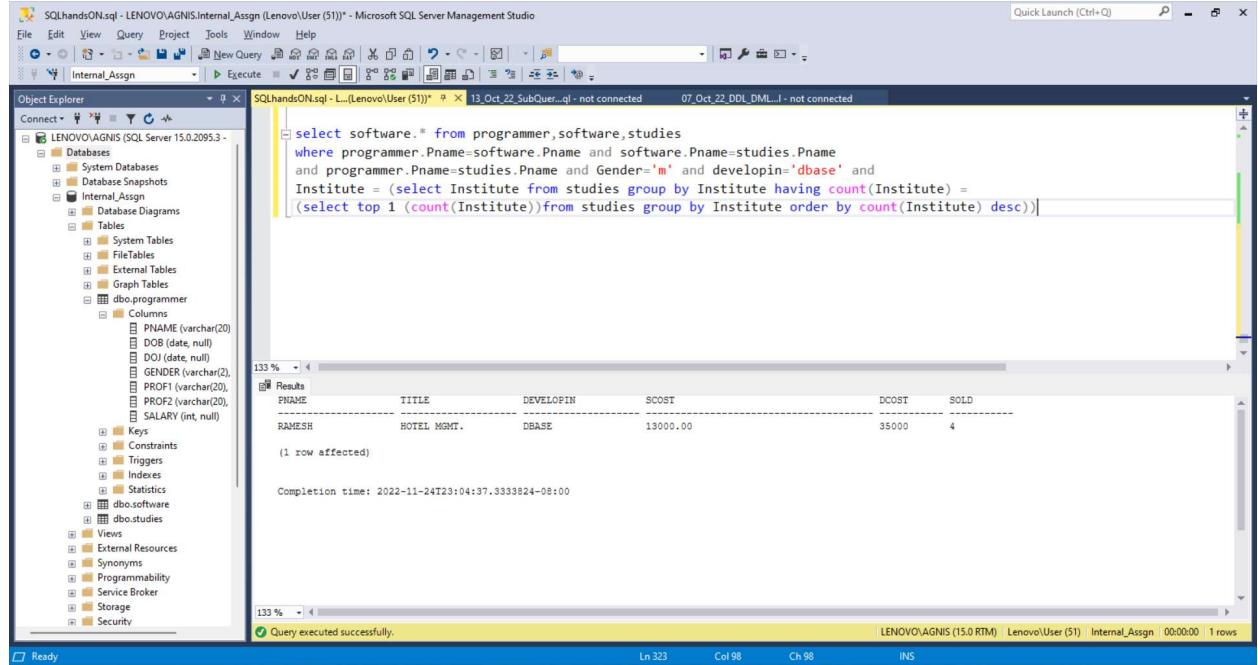
87. Display the number of packages, No. of Copies Sold and sales value of each programmer institute wise.



```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Asgn (Lenovo\User (51)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect Connect to database...
Databases
    System Databases
    Database Snapshots
    Internal_Asgn
        Database Diagrams
        Tables
            System Tables
            FileTables
            External Tables
            Graph Tables
        dbo.programmer
            Columns
                PNAME (varchar(20))
                DOB (date, null)
                DOI (date, null)
                GENDER (varchar(2))
                PROFI (varchar(20))
                PROFZ (varchar(20))
                SALARY (int, null)
            Keys
            Constraints
            Triggers
            Indexes
            Statistics
        dbo.software
        dbo.studies
        Views
        External Resources
        Synonyms
        Programmability
        Service Broker
        Storage
        Security
        Ready
        133 % | 13.Oct_22_SubQuer...ql - not connected | 07.Oct_22_DDL_DML...l - not connected | 00:00:00 | 4 rows
        Results
        Institute Dev Softw cost
        -----
        APPLE     2      2      48150.00
        BDPS     4      4      59875.00
        PRAGATHI 1      1      63000.00
        SABARI   8      8      383394.20
        (4 rows affected)
        Completion time: 2022-11-24T22:46:57.7366767-08:00
        133 % | 13.Oct_22_SubQuer...ql - not connected | 07.Oct_22_DDL_DML...l - not connected | 00:00:00 | 4 rows
        Query executed successfully.
        LENOVO\AGNIS (15.0 RTM) | Lenovo\User (51) | Internal_Asgn | 00:00:00 | 4 rows
        Ln 319 Col 2 Ch 2 INS
    
```

88. Display the details of the software developed in DBASE by Male Programmers, who belong to the institute in which most number of Programmers studied.



```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Asgn (Lenovo\User (51)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect Connect to database...
Databases
    System Databases
    Database Snapshots
    Internal_Asgn
        Database Diagrams
        Tables
            System Tables
            FileTables
            External Tables
            Graph Tables
        dbo.programmer
            Columns
                PNAME (varchar(20))
                DOB (date, null)
                DOI (date, null)
                GENDER (varchar(2))
                PROFI (varchar(20))
                PROFZ (varchar(20))
                SALARY (int, null)
            Keys
            Constraints
            Triggers
            Indexes
            Statistics
        dbo.software
        dbo.studies
        Views
        External Resources
        Synonyms
        Programmability
        Service Broker
        Storage
        Security
        Ready
        133 % | 13.Oct_22_SubQuer...ql - not connected | 07.Oct_22_DDL_DML...l - not connected | 00:00:00 | 1 rows
        Results
        PNAME      TITLE      DEVELOPIN      SCOST      DCOST      SOLD
        RAMESH     HOTEL MGMT.  DBASE       13000.00   35000     4
        (1 row affected)
        Completion time: 2022-11-24T23:04:37.3333824-08:00
        133 % | 13.Oct_22_SubQuer...ql - not connected | 07.Oct_22_DDL_DML...l - not connected | 00:00:00 | 1 rows
        Query executed successfully.
        LENOVO\AGNIS (15.0 RTM) | Lenovo\User (51) | Internal_Asgn | 00:00:00 | 1 rows
        Ln 323 Col 98 Ch 98 INS
    
```

89. Display the details of the software Developed by the male programmers Born before 1965 and female programmers born after 1975.

```

SELECT * FROM Programmer WHERE YEAR(DOB)<1990;
SELECT S.* , YEAR(DOB), GENDER FROM Programmer P,Software S
WHERE S.PNAME=P.PNAME AND
((GENDER='M' AND YEAR(DOB)<1965) OR (GENDER='F' AND YEAR(DOB)>1975))
    
```

The screenshot shows the SQL Server Management Studio interface. The Object Explorer on the left shows the database structure, including the 'Internal\_Assgn' database and its tables like 'Programmer' and 'Software'. The Results pane on the right displays the output of the executed query. The results table has columns: PNAME, TITLE, DEVELOPIN, SCOST, DCOST, SOLD, and GENDER. The output shows 0 rows affected, indicating no matches found for the specific gender and birth year criteria combined.

| PNAME | TITLE | DEVELOPIN | SCOST | DCOST | SOLD | GENDER |
|-------|-------|-----------|-------|-------|------|--------|
|       |       |           |       |       |      |        |

90. Display the details of the software that has developed in the language which is neither the first nor the second proficiency of the programmers.

```

select s.* from programmer p,software s
where s.Pname=p.Pname and (developin <> prof1 and developin <> prof2)
    
```

The screenshot shows the SQL Server Management Studio interface. The Object Explorer on the left shows the database structure, including the 'Internal\_Assgn' database and its tables like 'Programmer' and 'Software'. The Results pane on the right displays the output of the executed query. The results table has columns: PNAME, TITLE, DEVELOPIN, SCOST, DCOST, SOLD. The output shows 2 rows affected, with data for MARY and PATRICK.

| PNAME   | TITLE          | DEVELOPIN | SCOST   | DCOST | SOLD |
|---------|----------------|-----------|---------|-------|------|
| MARY    | CODE GENERATOR | C         | 4500.00 | 20000 | 23   |
| PATRICK | README         | CPP       | 300.00  | 1200  | 84   |

91. Display the details of the software developed by the male students of Sabhari.

```

select s.* from programmer p,software s
where s.Pname=p.Pname and (developin <> prof1 and developin <> prof2)

select S.* from Programmer P,software S,Studies ST
where S.Pname=S.Pname and S.Pname=ST.Pname and Gender='m' and Institute ='sabhari'

```

| FNAME | TITLE         | DEVELOPIN | SCOST   | DCOST | SOLD |
|-------|---------------|-----------|---------|-------|------|
| MARY  | README        | CPF       | 300.00  | 1200  | 84   |
| MARY  | README        | CPF       | 300.00  | 1200  | 84   |
| MARY  | README        | CPF       | 300.00  | 1200  | 84   |
| MARY  | README        | CPF       | 300.00  | 1200  | 84   |
| MARY  | README        | CPF       | 300.00  | 1200  | 84   |
| MARY  | PARACHUTES    | BASIC     | 399.95  | 6000  | 43   |
| ANAND | PARACHUTES    | BASIC     | 399.95  | 6000  | 43   |
| ANAND | PARACHUTES    | BASIC     | 399.95  | 6000  | 43   |
| ANAND | PARACHUTES    | BASIC     | 399.95  | 6000  | 43   |
| ANAND | PARACHUTES    | BASIC     | 399.95  | 6000  | 43   |
| ANAND | PARACHUTES    | BASIC     | 399.95  | 6000  | 43   |
| ANAND | VIDEO TITLING | PASCAL    | 7500.00 | 16000 | 9    |
| ANAND | VIDEO TITLING | PASCAL    | 7500.00 | 16000 | 9    |

92. Display the names of the programmers who have not developed any packages.

```

where S.Pname=S.Pname and S.Pname=ST.Pname and Gender='m' and Institute ='sabhari'

Select Pname from programmer where Pname not in (select Pname from software)

```

| Pname   |
|---------|
| ALTAF   |
| NELSON  |
| REBECCA |

(3 rows affected)

Completion time: 2022-11-24T23:15:09.5607395-08:00

### 93. What is the total cost of the Software developed by the programmers of Apple?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The main window contains the following SQL query:

```
Select Pname from programmer where Pname not in (select Pname from software)
select Sum(scost) Cost from software S,Studies ST where S.Pname=ST.Pname and Institute = 'apple'
```

The results pane displays the output:

| Cost    |
|---------|
| 2650.00 |

(1 row affected)

Completion time: 2022-11-24T23:16:57.2356385-08:00

Query executed successfully.

### 94. Who are the programmers who joined on the same day?

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The main window contains the following SQL query:

```
select Sum(scost) Cost from software S,Studies ST where S.Pname=ST.Pname and Institute = 'apple'
select A.Pname,A.doj from Programmer A join|Programmer B on A.doj=B.doj and A.Pname <> B.Pname
```

The results pane displays the output:

| Pname   | doj        |
|---------|------------|
| JULIANA | 1990-04-21 |
| KANALA  | 1992-01-02 |
| PATRICK | 1990-04-21 |
| REVATHI | 1992-01-02 |

(4 rows affected)

Completion time: 2022-11-24T23:19:25.3285986-08:00

Query executed successfully.

95. Who are the programmers who have the same Prof2?

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (52)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾ Internal_Assgn
LENVOVOAGNIS (SQL Server 15.0.2095.3 - Internal_Assgn)
  Databases
    System Databases
    Database Snapshots
    Internal_Assgn
      Tables
        System Tables
        FileTables
        External Tables
        Graph Tables
        dbo.programmer
          Columns
            PNAME (varchar(20))
            DOB (date, null)
            DOI (date, null)
            GENDER (varchar(2))
            PROF1 (varchar(20))
            PROF2 (varchar(20))
            SALARY (int, null)
            Keys
            Constraints
            Triggers
            Indexes
            Statistics
        dbo.software
        dbo.studies
      Views
      External Resources
      Synonyms
      Programmability
      Service Broker
      Storage
      Security
  Views
  External Resources
  Synonyms
  Programmability
  Service Broker
  Storage
  Security
Results
-----
ANAND
ALTAF
JULIANA
KAMALA
NELSON
QADIR
RAMESH
REBECCA
REVATHI
VILAYA
(10 rows affected)

Completion time: 2022-11-25T11:16:02.9321115-08:00
133 % ▾
Query executed successfully.
Ln 342 Col 68 Ch 68 INS
LENVOVOAGNIS (15.0 RTM) | Lenovo\User (52) | Internal_Assgn | 00:00:00 | 10 rows

```

96. Display the total sales value of the software, institute wise.

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (52)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾ Internal_Assgn
LENVOVOAGNIS (SQL Server 15.0.2095.3 - Internal_Assgn)
  Databases
    System Databases
    Database Snapshots
    Internal_Assgn
      Tables
        System Tables
        FileTables
        External Tables
        Graph Tables
        dbo.programmer
          Columns
            PNAME (varchar(20))
            DOB (date, null)
            DOI (date, null)
            GENDER (varchar(2))
            PROF1 (varchar(20))
            PROF2 (varchar(20))
            SALARY (int, null)
            Keys
            Constraints
            Triggers
            Indexes
            Statistics
        dbo.software
        dbo.studies
      Views
      External Resources
      Synonyms
      Programmability
      Service Broker
      Storage
      Security
  Views
  External Resources
  Synonyms
  Programmability
  Service Broker
  Storage
  Security
Results
-----
Institute      Cost
-----
APPLE         48150.00
BDPS          59875.00
PRAGATHI     63000.00
SABHARI       383394.20
(4 rows affected)

Completion time: 2022-11-25T11:20:16.4634234-08:00
133 % ▾
Query executed successfully.
Ln 346 Col 53 Ch 53 INS
LENVOVOAGNIS (15.0 RTM) | Lenovo\User (52) | Internal_Assgn | 00:00:00 | 4 rows

```

97. In which institute does the person who developed the costliest package studied.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a database named 'LENOVO\AGNIS'. The main window displays a query results grid with one row of data. The query executed was:

```
select ST.Institute,sum(s.sold*S.scost) Cost from software S join studies ST on ST.Pname=S.Pname group by ST.Institute
```

```
select Institute from Software S Join Studies ST On S.Pname=ST.Pname group by Institute,dcost having max(dcost)=(select max(dcost) from software)
```

The results grid shows:

| Institute |
|-----------|
| SABHARI   |

Completion time: 2022-11-25T11:22:10.2487411-08:00

Query executed successfully.

Ln 351 Col 52 Ch 52 INS

98. Which language listed in prof1, prof2 has not been used to develop any package.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a database named 'LENOVO\AGNIS'. The main window displays a query results grid with two rows of data. The query executed was:

```
On S.Pname=ST.Pname group by Institute,dcost having max(dcost)=(select max(dcost) from software)
```

```
select prof1 from programmer where prof1 not in(select developin from software)
```

```
union
```

```
select prof2 from programmer where prof2 not in(select developin from software)
```

The results grid shows:

| prof1   |
|---------|
| CLIPPER |
| FOXPRO  |

Completion time: 2022-11-25T11:35:08.1871521-08:00

Query executed successfully.

Ln 355 Col 80 Ch 80 INS

99. How much does the person who developed the highest selling package earn and what course did HE/SHE undergo.

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Asgn (Lenovo\User (63)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect - New Query Execute Quick Launch (Ctrl+Q) ×
LENVOVO\AGNIS (SQL Server 15.0.2095.3 - Internal_Asgn
Databases
Tables
Internal_Asgn
Programmer P, Software S
SELECT S._*, YEAR(DOB), GENDER FROM Programmer P,Software S
WHERE S.PNAME=P.PNAME AND
((GENDER='M' AND YEAR(DOB)<1965) OR (GENDER='F' AND YEAR(DOB)>1975))

SELECT SW.PNAME, COURSE, SALARY FROM studies AS ST,software AS SW, programmer AS PG
WHERE ST.PNAME = SW.PNAME AND ST.PNAME=PG.PNAME
AND SOLD= (SELECT MAX(SOLD) FROM software)

Results
PNAME      COURSE      SALARY
-----  -----
MARY        PGDCA       4500
(1 row affected)

Completion time: 2022-11-28T10:36:55.0581480-08:00
Query executed successfully.

```

100. What is the AVG salary for those whose software sales is more than 50,000/-.

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Asgn (Lenovo\User (52)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect - New Query Execute Quick Launch (Ctrl+Q) ×
LENVOVO\AGNIS (SQL Server 15.0.2095.3 - Internal_Asgn
Databases
Tables
Internal_Asgn
Programmer P, Software S
select avg(salary) AV_Salary from programmer P JOIN Software S
ON P.Pname=S.Pname and (sold>50000)

Results
AV_Salary
-----
3660
(1 row affected)

Completion time: 2022-11-25T11:46:25.8360673-08:00
Query executed successfully.

```

101. How many packages were developed by students, who studied in institute that charge the lowest course fee?

```
SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (52)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾
LENVOVO\AGNIS (SQL Server 15.0.2095.3 - Internal_Assgn)
Databases
System Databases
Database Snapshots
Internal_Assgn
Database Diagrams
Tables
System Tables
FileTables
External Tables
Graph Tables
dbo.programmer
Columns
PNAME (varchar(20))
DOB (date, null)
DOJ (date, null)
GENDER (varchar(2),
PROFI (varchar(20),
PROFZ (varchar(20,
SALARY (int, null)
Keys
Constraints
Triggers
Indexes
Statistics
dbo.software
dbo.studies
Views
External Resources
Synonyms
Programmability
Service Broker
Storage
Security
133 % ▾
Results
Co_unt
-----
2
3
2
(3 rows affected)

Completion time: 2022-11-25T11:59:01.7011105-08:00
Query executed successfully.
```

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure, including the 'Internal\_Assgn' database and its tables like 'programmer' and 'software'. The main pane displays a T-SQL query that calculates the average salary of programmers whose software cost is greater than 50000. It then groups by student name and course fee, counting the number of packages developed by each student who studied at the lowest course fee. The results show three rows with values 2, 3, and 2 respectively. A message at the bottom indicates the query was executed successfully.

102. How many packages were developed by the person who developed the cheapest package, where did HE/SHE study?

```
SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (52)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾
LENVOVO\AGNIS (SQL Server 15.0.2095.3 - Internal_Assgn)
Databases
System Databases
Database Snapshots
Internal_Assgn
Database Diagrams
Tables
System Tables
FileTables
External Tables
Graph Tables
dbo.programmer
Columns
PNAME (varchar(20))
DOB (date, null)
DOJ (date, null)
GENDER (varchar(2),
PROFI (varchar(20),
PROFZ (varchar(20,
SALARY (int, null)
Keys
Constraints
Triggers
Indexes
Statistics
dbo.software
dbo.studies
Views
External Resources
Synonyms
Programmability
Service Broker
Storage
Security
133 % ▾
Results
NOS
-----
4
(1 row affected)

Completion time: 2022-11-25T12:08:00.3709682-08:00
Query executed successfully.
```

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure, including the 'Internal\_Assgn' database and its tables like 'programmer' and 'software'. The main pane displays a T-SQL query that joins the 'programmer' and 'software' tables. It groups by programmer name and software cost, then finds the minimum cost. Finally, it counts the number of packages developed by the person with the minimum cost. The results show a single row with a value of 4. A message at the bottom indicates the query was executed successfully.

103. How many packages were developed by the female programmers earning more than the highest paid male programmer?

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (52)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾ New Query Execute
LENVOVOAGNIS (SQL Server 15.0.2095.3 - Internal_Assgn)
  Databases
    System Databases
    Database Snapshots
  Internal_Assgn
    Database Diagrams
    Tables
      System Tables
      FileTables
      External Tables
      Graph Tables
    dbo.programmer
      Columns
        PNAME (varchar(20))
        DOB (date, null)
        DOJ (date, null)
        GENDER (varchar(2))
        PROFI (varchar(20))
        PROFZ (varchar(20))
        SALARY (int, null)
      Keys
      Constraints
      Triggers
      Indexes
      Statistics
    dbo.software
    dbo.studies
    Views
    External Resources
    Synonyms
    Programmability
    Service Broker
    Storage
    Security
  133 % ↻ Results
  select count(developin) DEVCOUNT from Programmer P JOIN Software S
  ON S.Pname=P.Pname and GENDER ='F' and salary>
  (Select max(salary) from programmer P JOIN Software S ON S.Pname=P.Pname and GENDER ='M')
  1 row affected
Completion time: 2022-11-25T12:15:41.8429798-08:00
  133 % ↻
  Query executed successfully.
  LENVOVOAGNIS (15.0 RTM) | Lenovo\User (52) | Internal_Assgn | 00:00:00 | 1 rows
  Ready
  Ln 373 Col 90 Ch 90 INS

```

104. How many packages are developed by the most experienced programmer form BDPS.

```

SQLhandsON.sql - LENOVO\AGNIS.Internal_Assgn (Lenovo\User (63)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾ New Query Execute
LENVOVOAGNIS (SQL Server 15.0.2095.3 - Internal_Assgn)
  Databases
    System Databases
    Database Snapshots
  Internal_Assgn
    Database Diagrams
    Tables
      System Tables
      FileTables
      External Tables
      Graph Tables
    dbo.programmer
      Columns
        PNAME (varchar(20))
        DOB (date, null)
        DOJ (date, null)
        GENDER (varchar(2))
        PROFI (varchar(20))
        PROFZ (varchar(20))
        SALARY (int, null)
      Keys
      Constraints
      Triggers
      Indexes
      Statistics
    dbo.software
    dbo.studies
    Views
    External Resources
    Synonyms
    Programmability
    Service Broker
    Storage
    Security
  133 % ↻ Results
  SELECT COUNT(TITLE) FROM software WHERE PNAME =
  (SELECT PG.PNAME, DOJ FROM programmer AS PG
  WHERE DATEDIFF(DD,DOJ,GETDATE())=
  (SELECT MAX(DATEDIFF(DD,DOJ,GETDATE())))
  FROM programmer AS PG, studies AS ST
  WHERE PG.PNAME=ST.PNAME AND PG.PNAME IN (SELECT PNAME FROM studies WHERE INSTITUTE='BDPS')
  AND PG.PNAME IN (SELECT PNAME FROM studies WHERE INSTITUTE='BDPS'))
  Mag 116, Level 16, State 1, Line 464
  Only one expression can be specified in the select list when the subquery is not introduced with EXISTS.
  Completion timer: 2022-11-28T10:38:39.6518253-08:00
  133 % ↻
  Query completed with errors.
  LENVOVOAGNIS (15.0 RTM) | Lenovo\User (63) | Internal_Assgn | 00:00:00 | 0 rows
  Ready
  Ln 464 Col 68 Ch 68 INS

```

105. List the programmers (from the software table) and the institutes they studied.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane contains a query window with the following SQL code:

```
select Pname,Institute from studies where Pname not in (select Pname from software)
```

The results pane displays the output of the query:

| Pname   | Institute |
|---------|-----------|
| ALTRAF  | COIT      |
| NELSON  | PRAGATHI  |
| PATRICK | PRAGATHI  |
| REBECCA | BRILLIANT |

Below the results, a message indicates: 'Completion time: 2022-11-25T12:28:13.4725535-08:00'.

106. List each PROF with the number of Programmers having that PROF and the number of the packages in that PROF.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'LENOVO\AGNIS'. The central pane contains a query window with the following SQL code:

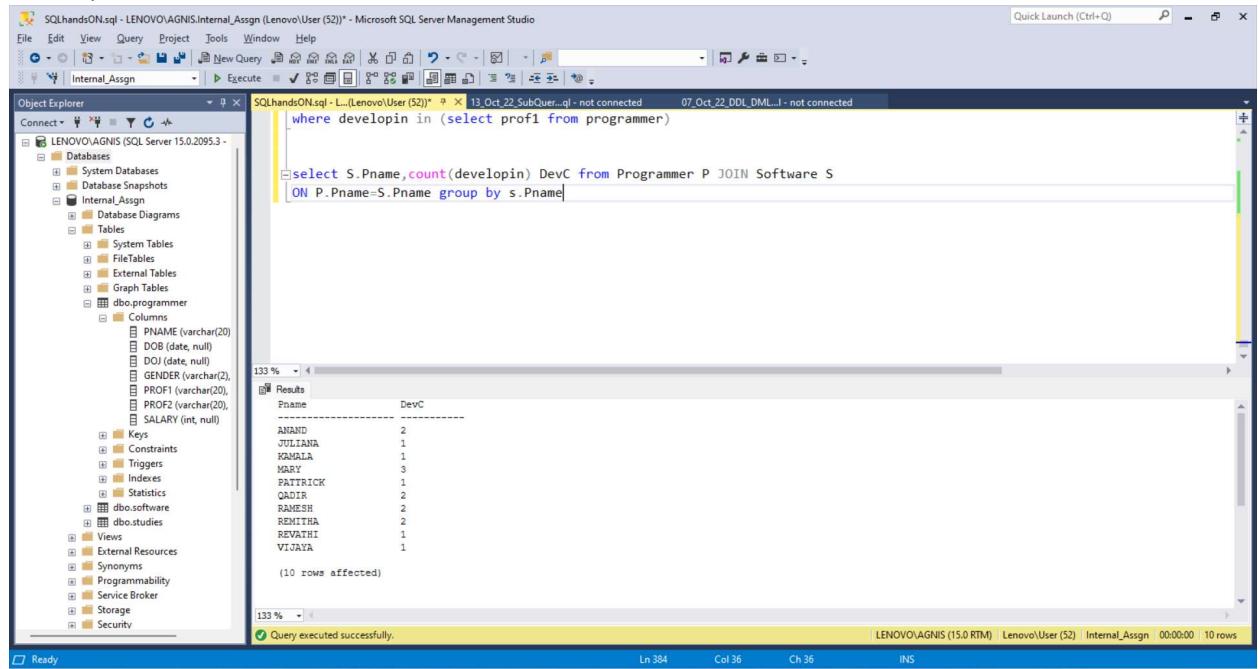
```
select Count (P.Pname) P_Count from software S JOIN Programmer P on S.Pname = P.Pname  
where developin in (select profi from programmer)
```

The results pane displays the output of the query:

| P_Count |
|---------|
| 13      |

Below the results, a message indicates: 'Completion time: 2022-11-25T12:35:11.2519839-08:00'.

107. List the programmer names (from the programmer table) and No. Of Packages each has developed.



The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure, including the 'Internal\_Assgn' database and its tables like 'Programmer' and 'Software'. The main window displays a query results grid titled 'Results' with two columns: 'Pname' and 'DevC'. The data in the grid is as follows:

| Pname   | DevC |
|---------|------|
| ANAND   | 2    |
| JULIANA | 1    |
| KAMALA  | 1    |
| MARY    | 3    |
| PATRICK | 1    |
| QADIR   | 2    |
| RAMESH  | 2    |
| REMITHA | 2    |
| REVATHI | 1    |
| VIJAYA  | 1    |

Below the grid, a message indicates '(10 rows affected)'. At the bottom of the screen, a status bar shows 'Query executed successfully' along with other system information.