

# Gram Panchayat Management System

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## 1 Query Execution in Different Languages

The following queries were executed using C++, Java, and Python.

### 1.1 Queries

1. Names of all citizens who hold more than 1 acre of land.
2. Names of all girls studying in school with a household income less than 1 lakh per year.
3. Total acres of land cultivating rice.
4. Number of citizens born after 1.1.2000 and have an educational qualification of class 10.
5. Names of Panchayat employees who also hold more than 1 acre of land.
6. Names of household members of the Panchayat Pradhan.
7. Number of street light assets installed in Phulera in 2024.
8. Number of vaccinations done in 2024 for children whose parents have an educational qualification of class 10.
9. Number of boy-child births in 2024.
10. Number of citizens belonging to households of at least one Panchayat employee.

## 2 Results and Output

```

dadi@RogStrix:~/Desktop/Labs_6th sem/DBMS_Lab/Assignment_3$ ./db
Database connected successfully.

Dropping existing tables (if any)...
All tables dropped successfully.

Creating tables...
All tables created successfully.

Inserting data into tables...
Data inserted successfully.

Executing SELECT queries...

=== Query 1 ===
+-----+-----+
| first_name | last_name |
+-----+-----+
| Priya      | Sharma    |
| Sunita     | Devi      |
| Vikram     | Singh     |
| Suresh     | Yadav     |
| Ramesh     | Mahto     |
| Anita      | Mahto     |
+-----+-----+

=== Query 2 ===
+-----+-----+
| first_name | last_name |
+-----+-----+
| Meera      | Kumari    |
+-----+-----+

=== Query 3 ===
+-----+-----+
| total_rice_area |
+-----+-----+
| 5.90            |
+-----+-----+

=== Query 4 ===
+-----+-----+
| young_10th_pass |
+-----+-----+
| 2                |
+-----+-----+

=== Query 5 ===
+-----+-----+
| first_name | last_name |
+-----+-----+
| Ramesh     | Mahto     |
| Vikram     | Singh     |
+-----+-----+

=== Query 6 ===
+-----+-----+
| first_name | last_name |
+-----+-----+
| Ramesh     | Mahto     |
| Anita      | Mahto     |
| Rohit      | Mahto     |
+-----+-----+

=== Query 7 ===
+-----+-----+
| total_street_lights |
+-----+-----+
| 1                    |
+-----+-----+

=== Query 8 ===
+-----+-----+
| total_vaccinations |
+-----+-----+
| 2                    |
+-----+-----+

=== Query 9 ===
+-----+-----+
| total_boy_births |
+-----+-----+
| 1                  |
+-----+-----+

=== Query 10 ===
+-----+-----+
| total_citizens |
+-----+-----+
| 6                |
+-----+-----+
dadi@RogStrix:~/Desktop/Labs_6th sem/DBMS_Lab/Assignment_3$

```

Figure 1: C++ Terminal Output

```

DBManager: java -cp .:postgres-42.7.5.jar DBManager
(myenv) dadi@RogStrix:~/Desktop/Labs_6th sem/DBMS_Lab/Assignment_3$ java -cp .:postgres-42.7.5.jar DBManager
Database connected successfully.

Dropping existing tables (if any)...
All tables dropped successfully.

Creating tables...
All tables created successfully.

Inserting data into tables...
Data inserted successfully.

Executing SELECT queries...

=== Query 43 ===
+-----+
| first_name | last_name |
+-----+
| Priya      | Sharma    |
| Sunita     | Devi      |
| Vikram     | Singh     |
| Suresh     | Yadav     |
| Ramesh     | Mahto     |
| Anita      | Mahto     |
+-----+

=== Query 44 ===
+-----+
| first_name | last_name |
+-----+
| Meera      | Kumari    |
+-----+

=== Query 45 ===
+-----+
| total_rice_area |
+-----+
| 5.90            |
+-----+

=== Query 46 ===
+-----+
| young_10th_pass |
+-----+
| 2               |
+-----+

=== Query 47 ===
+-----+
| first_name | last_name |
+-----+

=== Query 47 ===
+-----+
| first_name | last_name |
+-----+
| Ramesh     | Mahto     |
| Vikram     | Singh     |
+-----+

=== Query 48 ===
+-----+
| first_name | last_name |
+-----+
| Ramesh     | Mahto     |
| Anita      | Mahto     |
| Rohit      | Mahto     |
+-----+

=== Query 49 ===
+-----+
| total_street_lights |
+-----+
| 1                   |
+-----+

=== Query 50 ===
+-----+
| total_vaccinations |
+-----+
| 2                   |
+-----+

=== Query 51 ===
+-----+
| total_boy_births |
+-----+
| 1                 |
+-----+

=== Query 52 ===
+-----+
| total_citizens |
+-----+
| 6               |
+-----+
(myenv) dadi@RogStrix:~/Desktop/Labs_6th sem/DBMS_Lab/Assignment_3$ █

```

Figure 2: Java Terminal Output

```

(myenv) dadi@RogStrix:~/Desktop/Labs_6th sem/DBMS_Lab/Assignment_3$ python3 db.py
Database connected successfully.

Dropping existing tables (if any)...
All tables dropped successfully.

Creating tables...
All tables created successfully.

Inserting data into tables...
Data inserted successfully.

Executing SELECT queries...

=== Query 1 ===
+-----+-----+
| first_name | last_name |
+-----+-----+
| Priya      | Sharma    |
+-----+-----+
| Sunita     | Devi      |
+-----+-----+
| Vikram     | Singh     |
+-----+-----+
| Suresh     | Yadav     |
+-----+-----+
| Ramesh     | Mahto     |
+-----+-----+
| Anita      | Mahto     |
+-----+-----+

=== Query 2 ===
+-----+-----+
| first_name | last_name |
+-----+-----+
| Meera      | Kumari    |
+-----+-----+

=== Query 3 ===
+-----+
| total_rice_area |
+-----+
| 5.9 |
+-----+

+-----+
| young_10th_pass |
+-----+
| 2 |
+-----+

=== Query 5 ===
+-----+-----+
| first_name | last_name |
+-----+-----+
| Ramesh     | Mahto     |
+-----+-----+
| Vikram     | Singh     |
+-----+-----+

=== Query 6 ===
+-----+-----+
| first_name | last_name |
+-----+-----+
| Ramesh     | Mahto     |
+-----+-----+
| Anita      | Mahto     |
+-----+-----+
| Rohit      | Mahto     |
+-----+-----+

=== Query 7 ===
+-----+
| total_street_lights |
+-----+
| 1 |
+-----+

=== Query 8 ===
+-----+
| total_vaccinations |
+-----+
| 2 |
+-----+

=== Query 9 ===
+-----+
| total_boy_births |
+-----+
| 1 |
+-----+

=== Query 10 ===
+-----+
| total_citizens |
+-----+
| 6 |
+-----+

```

4  
Figure 3: Python Terminal Output