**TASK 3**

**Using Clauses, Operators and Functions in queries**

Aim:

To perform the query processing on databases for different retrieval results of queries using DML, DRL operations using aggregate, date, string, indent functions, set clauses and operators.

* To retrieve the location of a particular match conducted by its MatchID
* To retrieve the Players detail whose name start with ‘A’.
* Add a column Batting and Bowling in Player table.
* To count the number of right-hand batsman in a team.
* To display the CricketBoard details for the BoardIDs 'BID01', 'BID03', and 'BID06'.
* To select the names and IDs of players who are left-hand bowlers.
* To find the UmpireID of umpires who have not umpired any match.

**CricketBoard:**

|  |  |  |  |
| --- | --- | --- | --- |
| **BoardID** | **Name** | **Address** | **Contact\_No** |
| BID01 | Chennai Cricket Board | Chennai | 9988776699 |
| BID02 | Tiruvallur Cricket Board | Chennai | 9977886699 |
| BID03 | Viluppuram Cricket Board | Viluppuram | 9966886699 |
| BID04 | Trichy Cricket Board | Trichy | 9955886699 |
| BID05 | Madurai Cricket Board | Madurai | 9944886699 |
| BID06 | Tuticorin Cricket Board | Tuticorin | 9933886699 |
| BID07 | Selam Cricket Board | Selam | 9922886699 |
| BID08 | Tiruppur Cricket Board | Tiruppur | 9911886699 |

**Team:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **TeamID** | **BoardID** | **Name** | **Coach** | **Captain** |
| CCB01 | BID01 | ABS EXPRESS | G.D.RAMESH | SAMPATH KUMAR |
| CCB02 | BID01 | AVG EXPRESS | T.KARTHIK | Y.JOHN |
| TCB01 | BID02 | ANGRY BARD | TOM BABU | CINIL JOHN |
| TCB02 | BID02 | TIGER ROCK | S.KANNAN | BEN GEORGE |
| TRICB01 | BID04 | ROCK | K.PAUL | K.MUTHU |
| VCB01 | BID03 | RAINBOW | S.RAJESHKUMAR | MANIMARAN |
| MCB01 | BID05 | PANTHER | SARAVANAN | R.SUNILKUMAR |
| TUCB01 | BID06 | THUNDER | D ALEX | BARATHI |
| SCB01 | BID07 | EAGLE | SOMU | SRI HARI |
| TICB01 | BID08 | KINGS | D ANAND | MATHAN |

**Player:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PlayerID** | **TeamID** | **FName** | **LName** | **Age** | **DateofBirth** | **PlayingRole** | **email** | **contact\_no** | **Batting** | **Bowling** |
| 1 | CCB01 | Raj | N | 27 | 29-Jun-96 | Bowler | rajn@gmail.com | 9191910101 | null | left-hand |
| 33 | CCB01 | Balaji | D | 23 | 2-Jan-99 | Batsman | balajid@gmail.com | 9191910031 | right-hand | *Null* |
| 2 | CCB02 | Krishna | R | 23 | 2-Jan-99 | Bowler | krishnar@gmail.com | 9191930103 | *null* | right-hand |
| 18 | CCB02 | Kishore | K | 24 | 2-Sep-98 | ALL ROUNDER | kishorek@gmail.com | 9291930105 | left-hand | left-hand |
| 19 | TCB01 | Karthick | K | 24 | 14-Sep-98 | Batsman | karthickk@gmail.com | 9292930107 | right-hand | *Null* |
| 62 | TCB01 | Amar | J | 22 | 21-Sep-98 | Batsman | Amarj@gmail.com | 9292930508 | right-hand | *Null* |
| 102 | TCB02 | Akash | G | 21 | 26-Sep-99 | Batsman | Amarj@gmail.com | 9292930510 | right-hand | *Null* |
| 12 | TCB02 | Premkumar | S | 21 | 13-Oct-99 | Bowler | Premkumars@gmail.com | 9592930517 | *null* | right-hand |
| 1 | VCB01 | Prem | V | 23 | 13-Apr-97 | Bowler | Premkumars@gmail.com | 9592950517 | *null* | left-hand |
| 21 | VCB01 | Kali | J | 21 | 11-Apr-02 | Batsman | Kalij@gmail.com | 9592950630 | right-hand | *Null* |
| 61 | VCB01 | Kamalesh | A | 22 | 21-Jun-01 | Batsman | Kamalesha@gmail.com | 9592958730 | right-hand | *Null* |
| 66 | VCB01 | Ganesh | V | 24 | 21-Jun-98 | Batsman | Ganeshv@gmail.com | 9592958790 | right-hand | *Null* |
| 303 | TRICB01 | Arun | T | 24 | 21-Oct-98 | Batsman | Ganeshv@gmail.com | 9592958450 | right-hand | *Null* |
| 313 | TRICB01 | Srinivasan | N | 24 | 21-Oct-98 | Batsman | srinivasann@gmail.com | 9992958450 | right-hand | *Null* |

**Match:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **MatchID** | **TeamID** | **TeamID** | **Match\_Date** | **Time1** | **Result** |
| M01 | CCB01 | TCB01 | 22-Jun-22 | 1.3 | TCB01 - WIN |
| M02 | CCB02 | TCB02 | 22-Jun-22 | 8.3 | CCB01 - WIN |
| M03 | TRICB01 | TCB01 | 24-Jun-22 | 8.3 | TCB01 - WIN |
| M04 | TRICB01 | TCB02 | 25-Jun-22 | 8.3 | TRICB01 - WIN |

**Ground:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **GroundID** | **MatchID** | **Name** | **Location** | **Capacity** |
| GID01 | M01 | Nehru | Chennai | 10000 |
| GID02 | M02 | GK | Coimbatore | 10000 |
| GID03 | M03 | Sankar | Nellai | 6000 |

**Umpire:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **UmpireID** | **FName** | **LName** | **Age** | **DateofBirth** | **Country** | **Email** | **contact\_no** |
| UID01 | Venkatesh | T | 45 | 21-Jun-78 | INDIA | [venkatesh@gmail.com](mailto:venkatesh@gmail.com) | 9665571435 |
| UID02 | Muthukumar | R | 46 | 1-Jun-79 | INDIA | [mutukumarr@gmail.com](mailto:mutukumarr@gmail.com) | 9665571460 |
| UID03 | Somu | K | 42 | 1-Jun-83 | INDIA | somuk@gmail.com | 9664471460 |

**Umpire\_Umpired:**

|  |  |  |
| --- | --- | --- |
| **UmpireID** | **MatchID** | **GroundID** |
| UID01 | M01 | GID01 |
| UID02 | M03 | GID02 |

3.1: To retrieve the location of a particular match conducted by its MatchID

SQL> SELECT LOCATION FROM GROUND WHERE MatchID=’M03’;

Resul:

|  |
| --- |
| **Location** |
| Nellai |

3.2: To retrieve the Players detail whose name start with ‘A’.

SQL> Select \* from Player where FName like 'A%';

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PlayerID** | **TeamID** | **FName** | **LName** | **Age** | **DateofBirth** | **PlayingRole** | **Email** | **contact\_no** |
| 62 | TCB01 | Amar | J | 22 | 21-Sep-98 | Batsman | [Amarj@gmail.com](mailto:Amarj@gmail.com) | 9292930508 |
| 102 | TCB02 | Akash | G | 21 | 26-Sep-99 | Batsman | [Amarj@gmail.com](mailto:Amarj@gmail.com) | 9292930510 |
| 303 | TRICB01 | Arun | T | 24 | 21-Oct-98 | Batsman | [Ganeshv@gmail.com](mailto:Ganeshv@gmail.com) | 9592958450 |

3.3: Add a column Batting and Bowling in Player table.

SQL> Alter table player add Batting varchar(10);

Table Altered

SQL> Alter table player add Bowling varchar(10);

Table Altered

3.4: To count the number of right-hand batsman in a team.

SQL> Select count(\*) from Player where Batting='right-hand';

Result:

|  |
| --- |
| **count(\*)** |
| 9 |

3.5: To display the CricketBoard details for the BoardIDs 'BID01', 'BID03', and 'BID06'.

SQL> Select \* from CricketBoard where BoardID in('BID01','BID03','BID06');

|  |  |  |  |
| --- | --- | --- | --- |
| **BoardID** | **Name** | **Address** | **Contact\_No** |
| BID01 | Chennai Cricket Board | Chennai | 9988776699 |
| BID03 | Viluppuram Cricket Board | Viluppuram | 9966886699 |
| BID06 | Tuticorin Cricket Board | Tuticorin | 9933886699 |

3.6: To select the names and IDs of players who are left-hand bowlers.

SQL> Select playerID, FName, LName from player where Bowling='left-hand';

|  |  |  |
| --- | --- | --- |
| **PlayerID** | **FName** | **LName** |
| 1 | Raj | N |
| 18 | Kishore | K |
| 1 | Prem | V |

3.7: To find the UmpireID of umpires who have not umpired any match.

SQL> select a.UmpireID from Umpire a where UmpireID NOT IN(select UmpireID from Umpire\_Umpired);

Result:

|  |
| --- |
| **UmpireID** |
| UID03 |

**Result:**

Thus the query processing on database for different retrieval result of query using Clauses, Operators and Functions in queries has been performed successfully.