PROJECT BREAKDOWN

Step One:

- Install Oracle 19c
- Create database
- Create USER ID (first initial and last name) with default Tablespace (logical)
- Grant required privileges and roles

Step Two:

- Collect business requirements meet customers
- Plan and design your application
- Develop ER diagram / data-model logical view

Step Three:

- Start coding your application (create tables, PK, FK and other constraints)
- Create tables (five minimum)
- Create relations
- Develop constraints (PK, FK, Composite Key, Not Null, Sequences, Index etc.)
- Insert data into tables (15 rows minimum)

Step Four:

- Develop SQL queries
- Advanced SQL queries

Step Five:

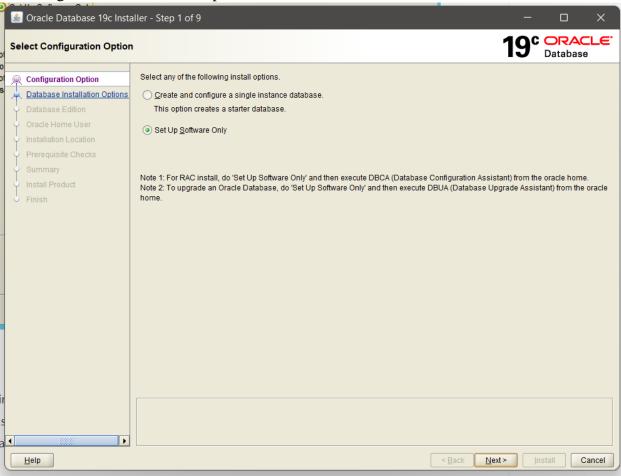
- Develop report
- Analyze data

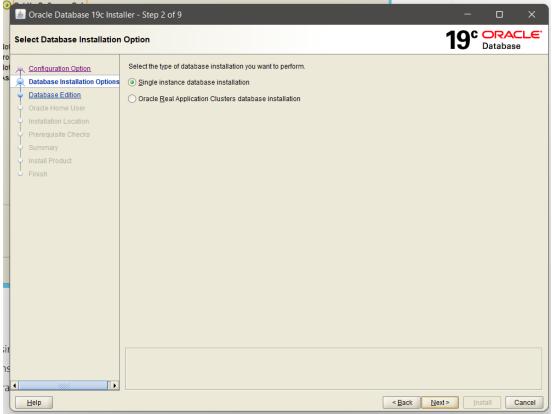
STEP ONE:

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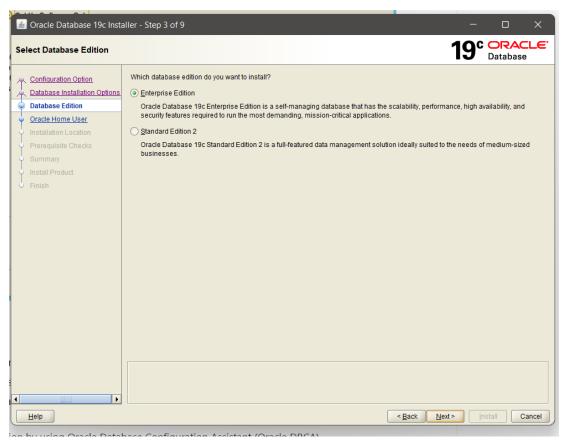
INSTALLATION:

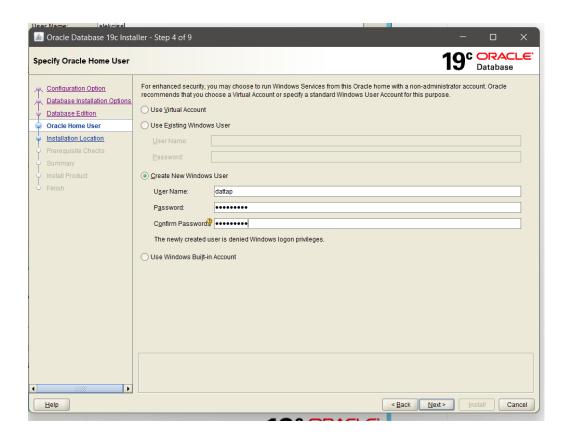
Installing the Oracle 19c Enterprise Edition.

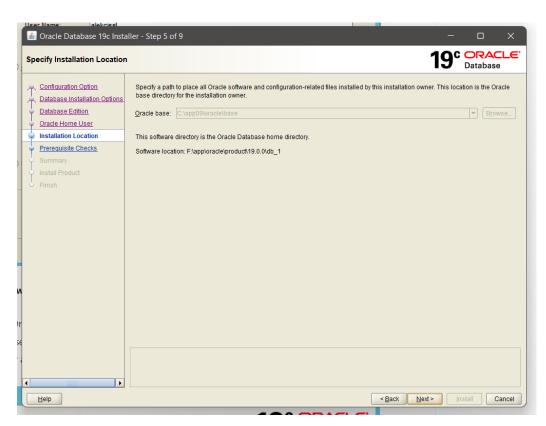




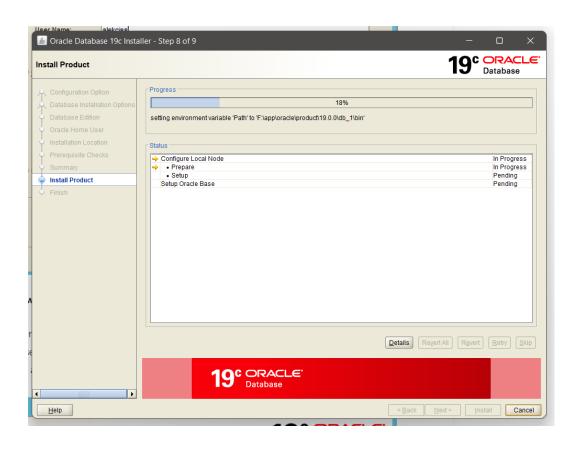
tion by using Oracle Database Configuration Assistant (Oracle DDCA)

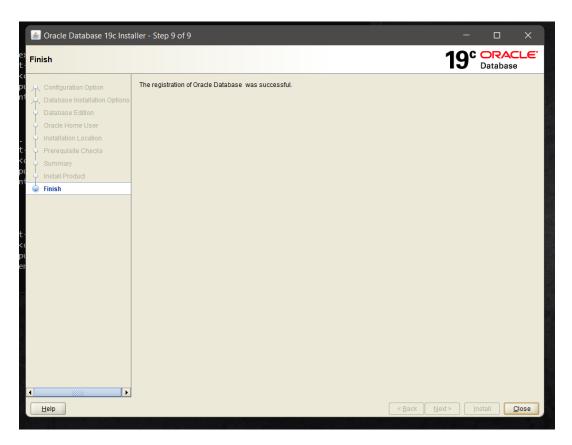






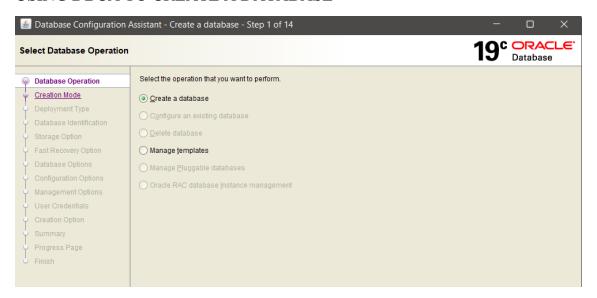


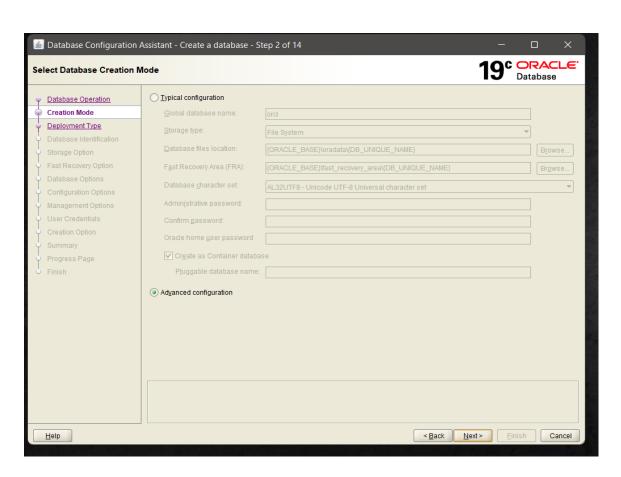


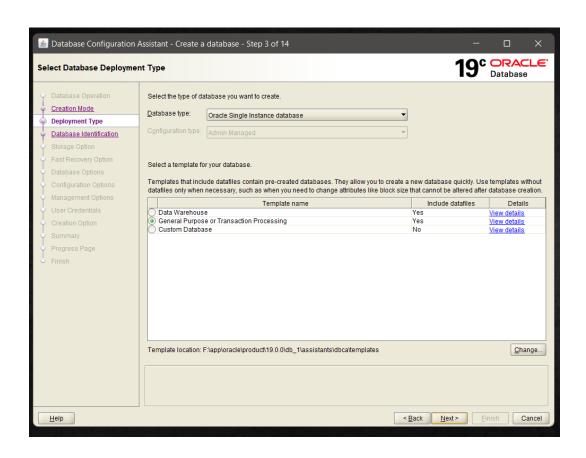


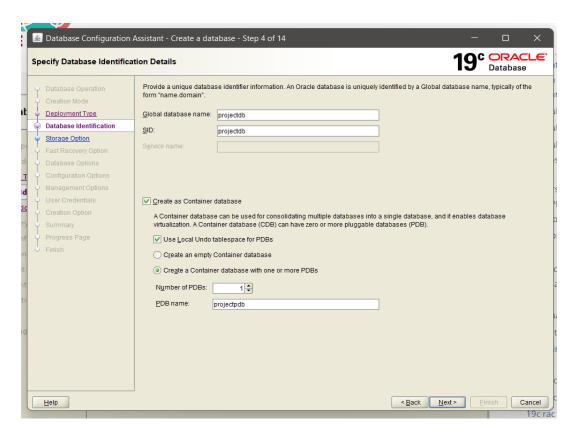
CREATING DATABASE:

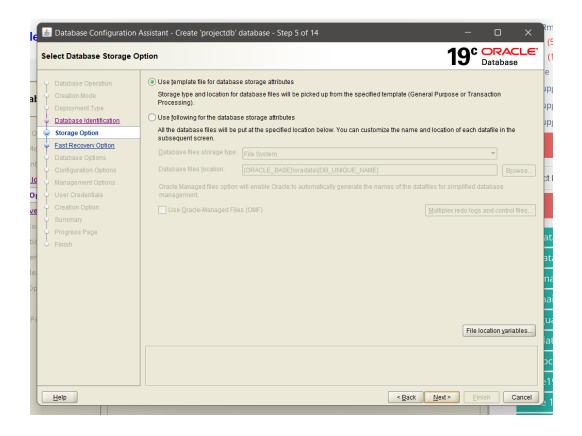
USING DBCA TO CREATE A DATABASE

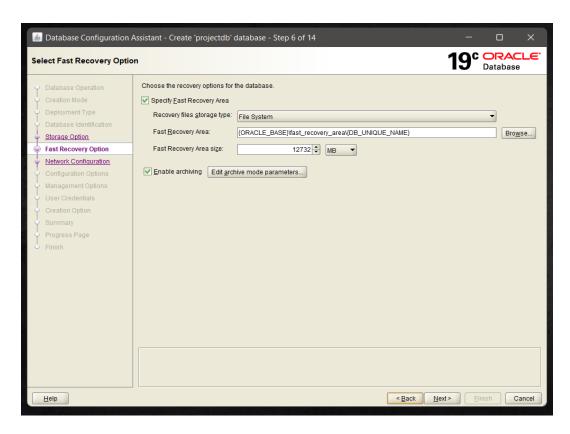


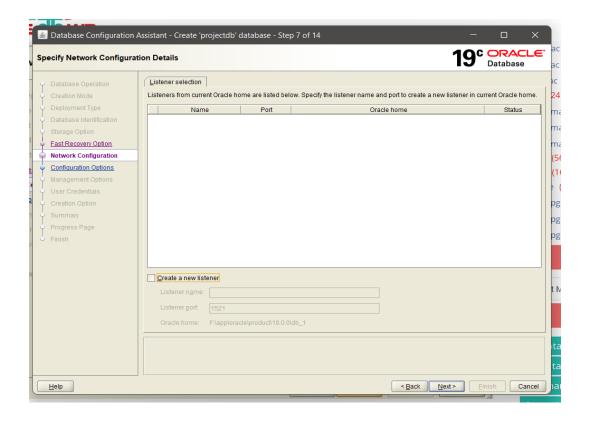


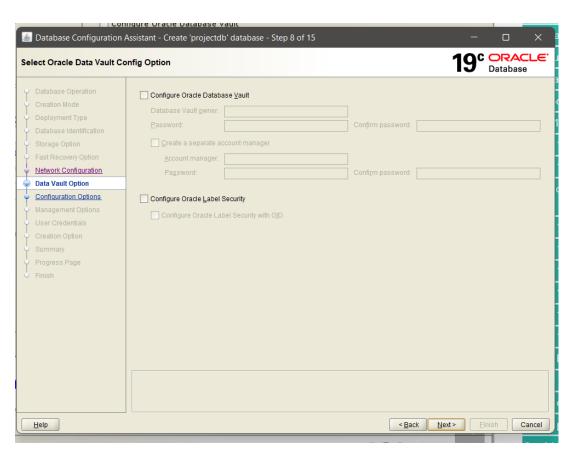


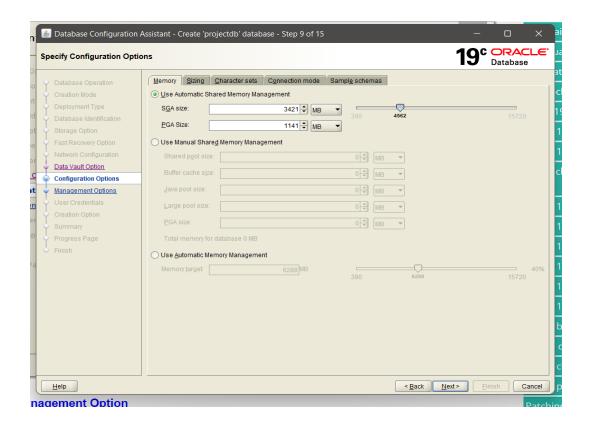


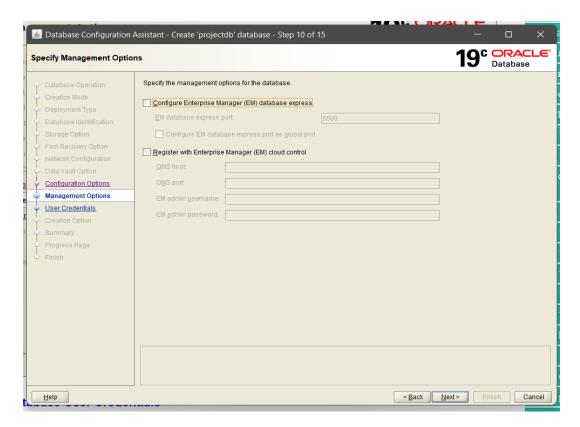


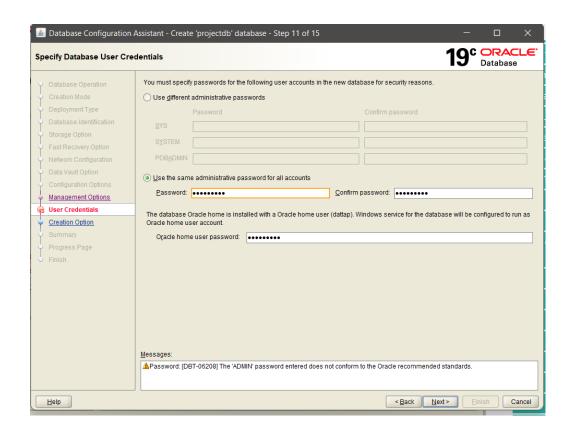




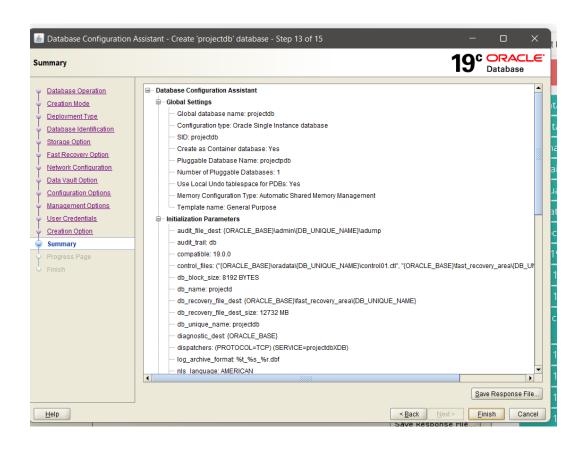


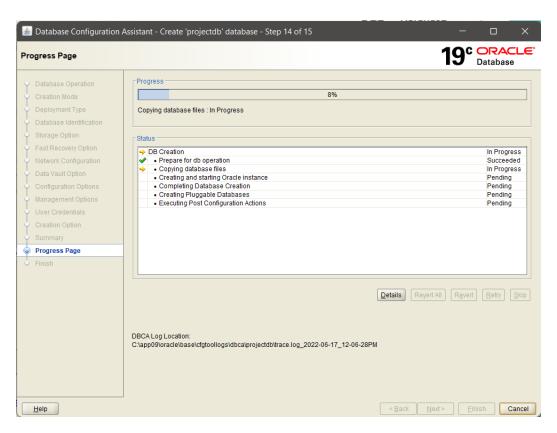


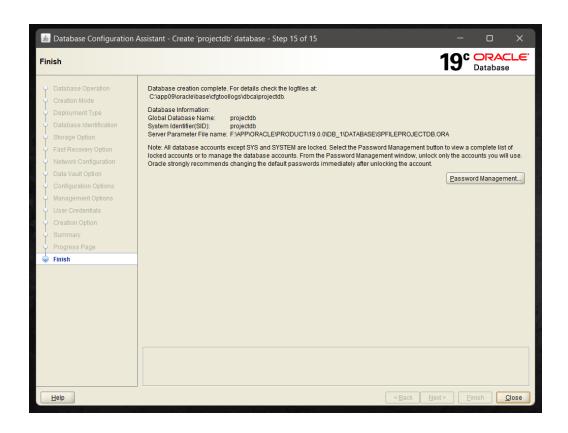


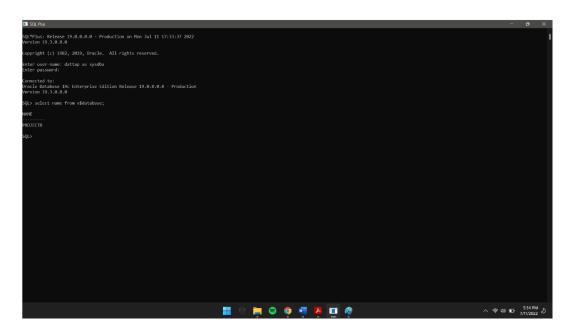












CREATING A NEW USER AND GRANTING ALL PRIVILEGES TO THAT USER

```
SP2-0734: unknown command beginning "default ta..." - rest of line ignored.

SQL> grant dba to dpillalamarri

2
SQL> grant dba to dpillalamarri;
grant dba to dpillalamarri

ERROR at line 1:
ORA-01917: user or role 'DPILLALAMARRI' does not exist

SQL> alter session set "_ORACLE_SCRIPT"=true;

Session altered.

SQL> grant dba to dpillalamarri;
grant dba to dpillalamarri;
grant dba to dpillalamarri

ERROR at line 1:
ORA-01917: user or role 'DPILLALAMARRI' does not exist

SQL> create user dpillalamarri identified by rohitp123;

User created.

SQL> grant dba to dpillalamarri;
Grant succeeded.

SQL> grant dba to dpillalamarri;
Grant succeeded.
```

STEP 2:

- Collect business requirements meet customers
- Plan and design your application
- Develop ER diagram / data-model logical view

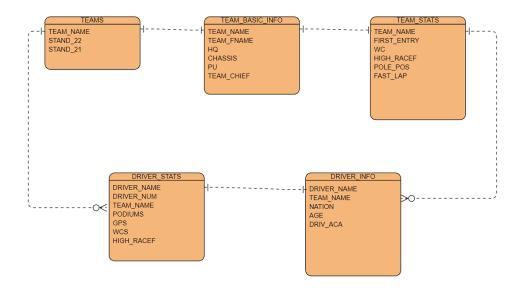
The project which I am doing is based on the sport Formula One.

I have created a database in which I have gathered all the required information from the sport like the team names, team's history in the sport, the current car details, Team chiefs, and the drivers, their backgrounds like the academy in which they graduated, their stats, and their personal data like Nationality, date of birth. I have taken the data from Formula one sport's official website.

Now based on the requirements and gathered data, I have created five tables:

Teams, Team_Stats, Team_Basic_Info, Driver_Stats, Driver_info.

ER DIAGRAM:



DRIVER NAME = DRIVER NAME

 $STAND_22 = STANDINGS IN 2022$

STAND 21 = STANDINGS IN 2021

TEAM_FNAME = TEAM FULL NAME

HQ = HEADQUARTERS

PU = POWER UNIT OF THE TEAM'S CAR

TEAM_CHIEF = HEAD OF THE TEAM

TEAM ENTRY = TEAM'S FIRST OFFICIAL ENTRY IN THE SPORT(YEAR)

WC = NUMBER OF WORLD CHAMPIONSHIPS

HIGH_RACEF = HIGHEST RACE FINISH BY THE TEAM

POLE_POS = NUMBER OF POLE POSITIONS BY THE TEAM

FAST_LAP = NUMBER OF FASTEST LAPS AWARDS

DRIVER_NAME = THE NAME OF THE DRIVER

DRIVER_NUM = CAR NUMBER OF THE DRIVER

GPS = NUMBER OF GRAND PRIXS ENTERED BY THE DRIVER

WCS = NUMBER OF WORLD CHAMPIONSHIPS FOR THE DRIVER

NATION = THE COUNTRY FOR WHICH DRIVER IS DRIVING

DRIV_ACA = THE DRIVER ACADEMY IN WHICH THE DRIVER

GRADUATED

STEP THREE:

- Start coding your application (create tables, PK, FK and other constraints)
- Create tables (five minimum)
- Create relations
- Develop constraints (PK, FK, Composite Key, Not Null, Sequences, Index etc.)
- Insert data into tables (15 rows minimum)

Creating Tables:

```
SQL> ED
Wrote file afiedt.buf

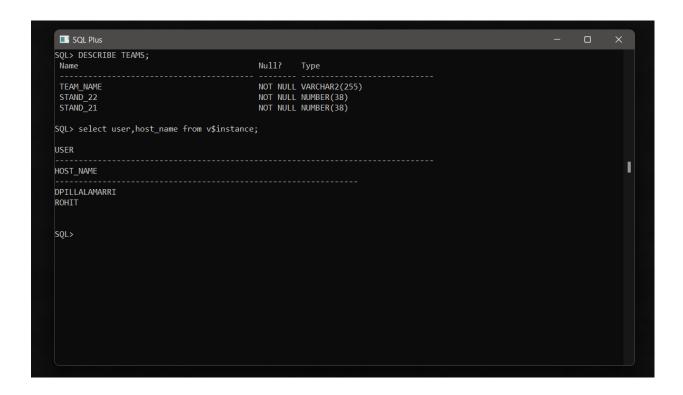
1 CREATE TABLE TEAMS(
2 TEAM_NAME VARCHARZ(25S) NOT NULL,
3 STAND_22 INT NOT NULL,
4 STAND_21 INT NOT NULL,
5* PRIMARY KEY (TEAM_NAME))
SQL> /
Table created.

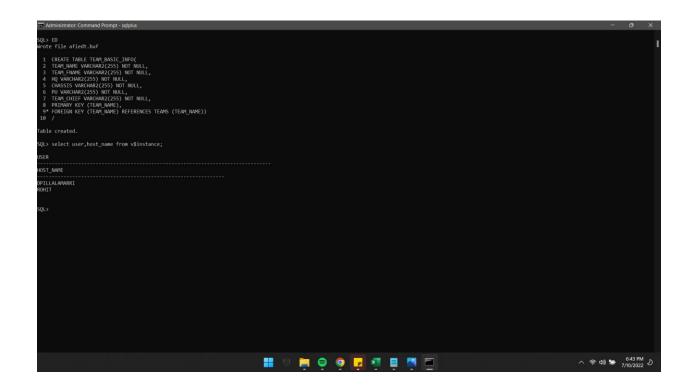
SQL> select user,host_name from v$instance;

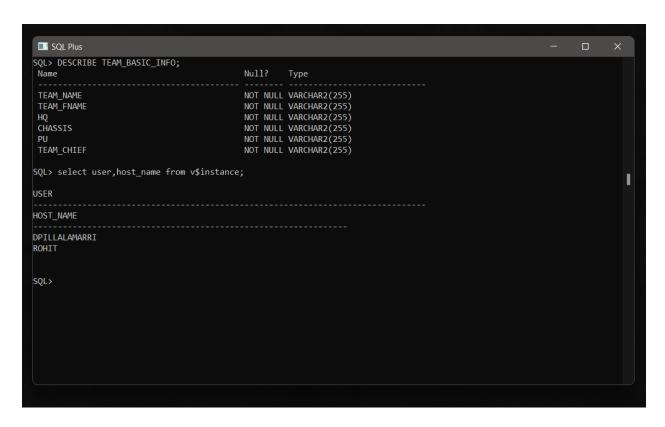
USER
HOST_NAME

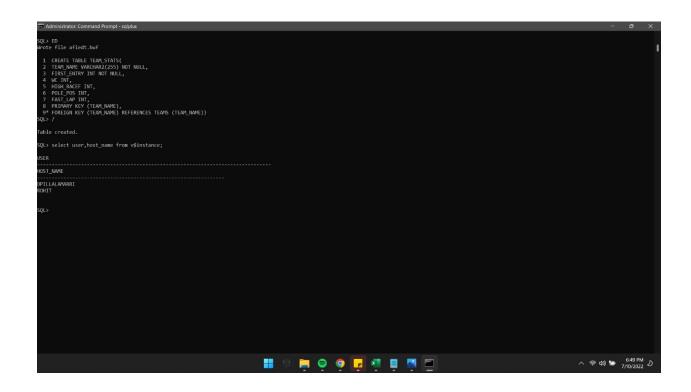
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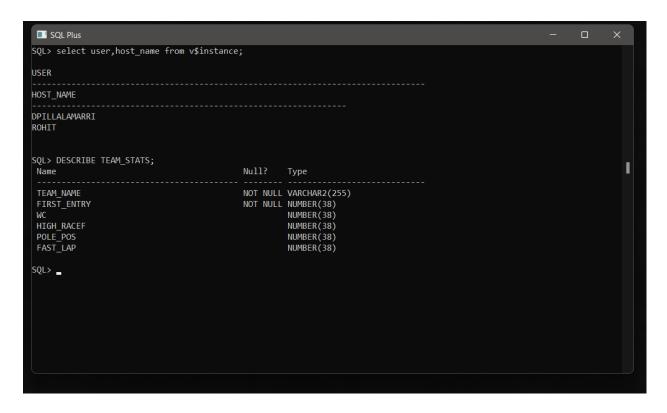
SQL> _
```



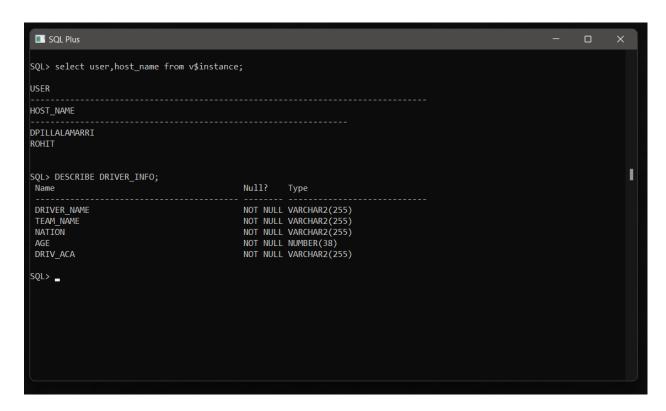




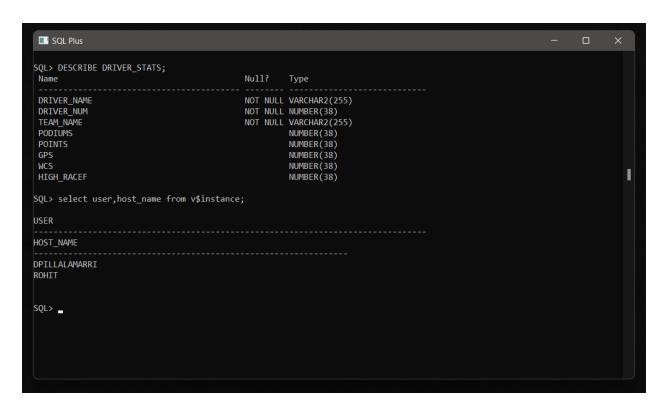


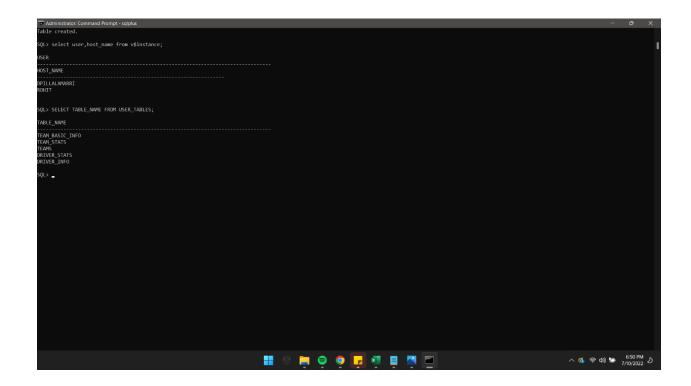




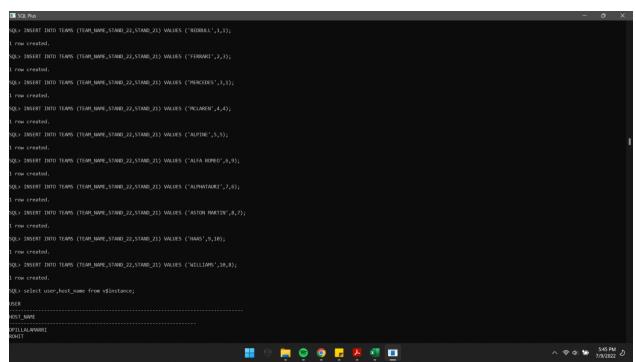


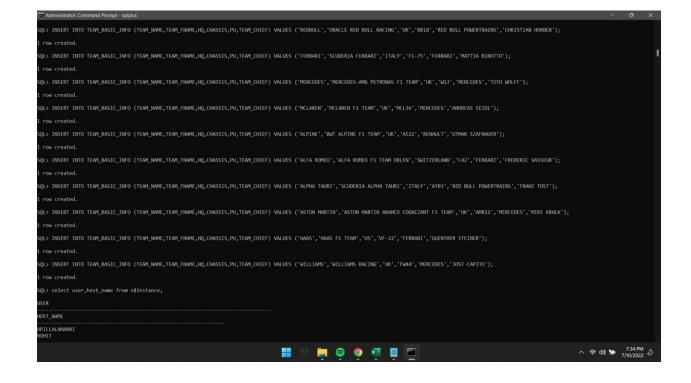


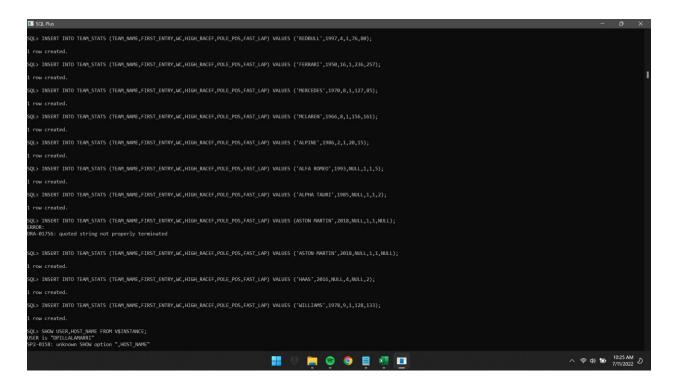


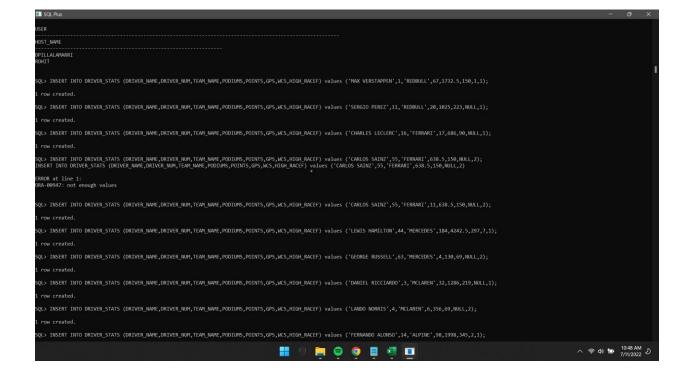


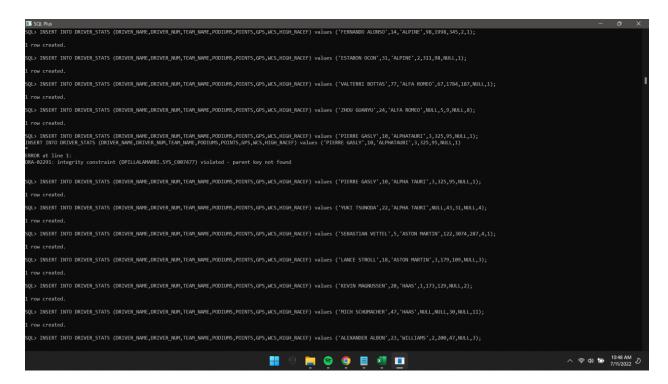
Inserting data in the tables:



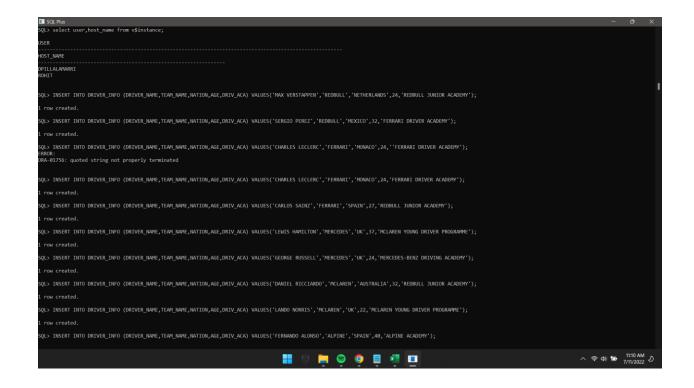


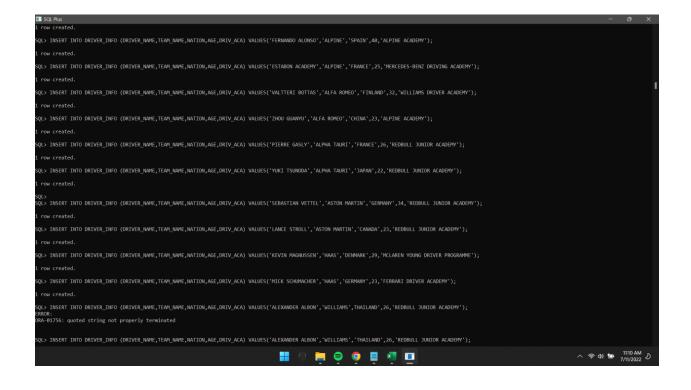


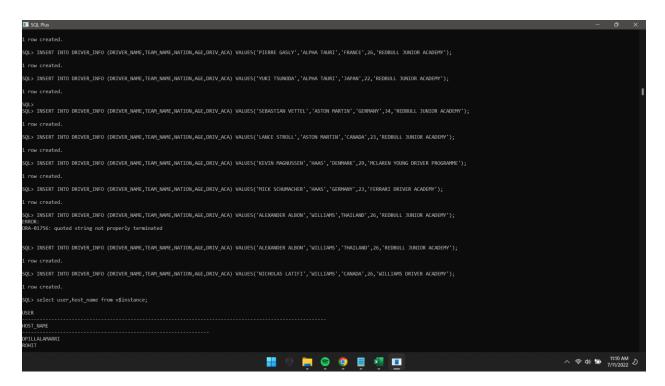




SQL> INSERT INTO DRIVER STATS (DRIVER_NAME_DRIVER_NUM, FEAM_NAME_PODIUMS_PDINTS_GPS_NCS_HIGH_RACEF) values ('PIERRE GASLY',10, 'ALPHATAURI',3,325,95,NULL,1); INSERT INTO DRIVER_STATS (DRIVER_NAME_DRIVER_NAME_PODIUMS_PDINTS_GPS_NCS_HIGH_RACEF) values ('PIERRE GASLY',10, 'ALPHATAURI',3,325,95,NULL,1)		
- RAROR at line 1: ORA-02291: integrity constraint (DPILLALAWARRI.SYS_C007477) violated - parent key not found		
SQL> INSERT INTO DRIVER_STATS (DRIVER_NAME,DRIVER_NAM,TEAM_NAME,PODIUMS,POINTS,GPS,NCS,HIGH_RACEF) values ('PIERRE GASLY',10,'ALPHA TAURI',3,325,95,NULL,1);		- 1
1 row created.		
SQL> INSERT INTO DRIVER_STATS (DRIVER_NAME,ORIVER_NUM,FEAM_NAME,ORDIWRS,POINTS,GPS,NCS,HIGH_RACEF) values ('YUKI TSUMODA',22,'ALPHA TAURI',MULL,43,31,MULL,4);		
1 row created.		
SQL> INSERT INTO DRIVER_STATS (DRIVER_NAM, GRIVER_NAM, TEAM_NAME, POOTUMS, POINTS, GPS, NCS, NIEGH_RACEF) values ('SEBASTIAN VETTEL',5, 'ASTON MARTIN',122,3074,207,4,1);		
1 row created.		
SQL> INSERT INTO DRIVER_STATS (DRIVER_NAM, DEAM, DEAM, DEAM, DEAM, PODIUMS, POINTS, GPS, NCS, HIGH_RACEF) values ('LANCE STROLL',18, 'ASTON MARTIN',3,179,109,NULL,3);		
1 row created.		
SQL> INSERT INTO DRIVER_STATS (DRIVER_NAM, DEAM_NAME, POOTUMS, POINTS, GPS, NCS, HIGH_RACEF) volues ('KEVIN MAGNUSSEN', 20, 'HAAS', 1,173,129,NULL, 2);		
1 row created.		
SQL> INSERT INTO DRIVER_STATS (DRIVER_NAME,DRIVER_NAM,TEAM_NAME,PODIUMS,DRIMTS,GPS,NCS,HIGH_RACEF) values ('MICH SCHAMACHER',47, 'HAAS',NULL,NULL,38,NULL,11);		
1 row created.		
SQL> INSERT INTO DRIVER_STATS (DRIVER_NAME_DRIVER_NUM,TEAM_NAME,PODILWS,POINTS,GPS,NCS,HIGH_RACEF) values ('ALEXANDER ALBON',23,'WILLIAMS',2,200,47,NULL,3);		
1 row created.		
SQL> INSERT INTO DRIVER_STATS (DRIVER_NAME_DRIVER_NAM,TEAM_NAME,PODILWS,POINTS,GPS,MCS,HIGH_RACEF) values ('NICHDIAS LATIFI',6,'WILLIAMS',NULL,7,48,NULL,7);		
1 row created.		
SQL> select user,host_name from v\$instance;		
USER		
POST_MANE		
DPILIALAMARRI ROHIT		
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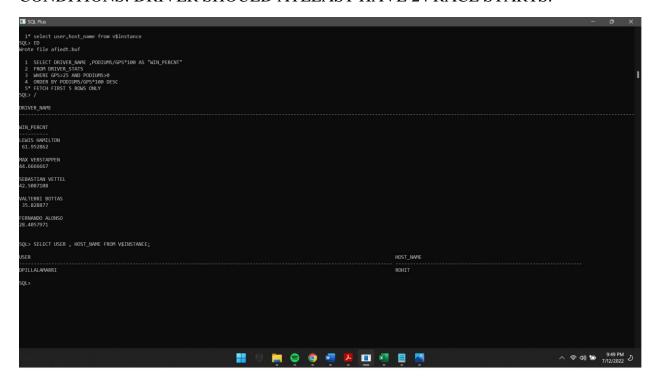
STEP 4:

- Develop SQL queries
- Advanced SQL queries

Query 1:

SHOW TOP 5 DRIVERS WITH MOST WIN PERCENTAGE

CONDITIONS: DRIVER SHOULD ATLEAST HAVE 24 RACE STARTS.

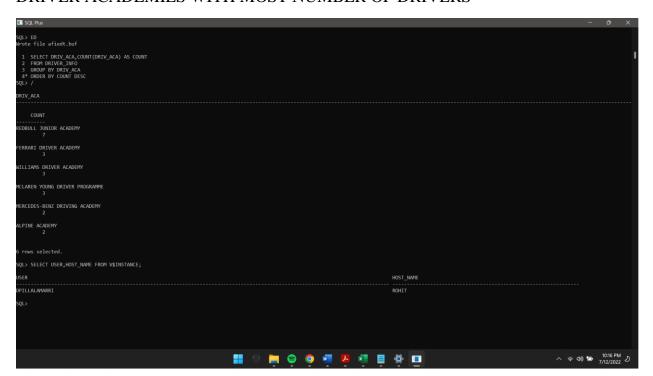


QUERY 2:

TEAMS WITH MOST WORLD CHAMPIONSHIPS

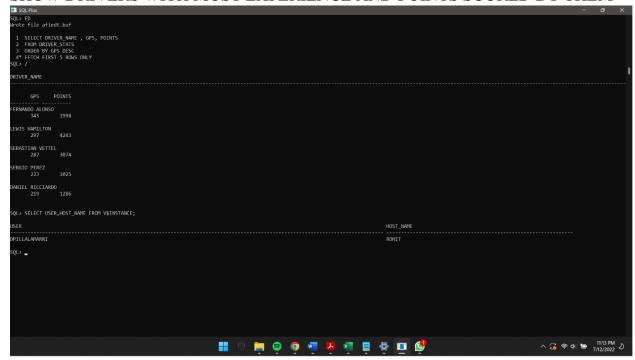
QUERY 3:

DRIVER ACADEMIES WITH MOST NUMBER OF DRIVERS



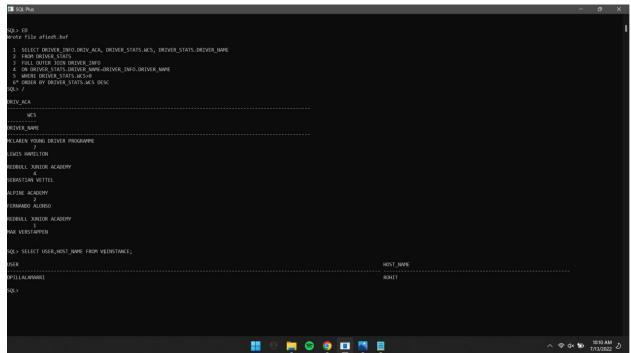
QUERY 4:

SHOW DRIVERS WITH MOST EXPERIENCE AND POINTS SCORED BY THEM



QUERY 5:

SELECT DRIVER ACADEMIES WITH MOST WORLD CHAMPIONSHIPS



Step Five:

- Develop report
- Analyze data

From the above queries made and by the data I gathered for the project , the conclusion I got is that the red bull academy is the most successful academy in the sport because seven drivers from the 20 drivers are from red bull academy and the academy even has 5 championships.

Lewis Hamilton is most successful driver in the current grid with most wins, most world championships and most points.