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## Requirements for a Football Club Database

### I. System Description and Constraints

A football club is divided into several sections such as staff, team, stadium, department, equipment, sponsors, contracts, and player. There are various types of staff such as manager, assistant manager, chief analyst, fitness coach, nutritionist, physiotherapist, and scout. Every staff member has certain responsibility like managing the schedule, supervising players, for instance, some staff are in charge of giving feedback about the player performance. Most football clubs earn profits by selling tickets of several types, for example, we have front seats that are sold at a higher price than the back seats. Eventually, people can buy tickets from the stadium which are identified by their identification number. Moreover, there is a specific type of ticket that gives access to people in order to have a tour in the stadium. The football field is the most important characteristic of a football academy. Moreover, the stadium is characterized by its name, number of seats, and location. Additionally, there are several departments in the stadium, each of which has a certain role. Departments are defined by their name and department number. Moreover, each department has a unique extension in order to contact them. For instance, some types of departments are club services, board of directors, business operations, and football techniques development. Each football team department requires certain equipment's. For example, the players require balls, boots, shin guards, socks, and goalkeeper gloves. Furthermore, the coaching staff requires board, marker, desk, chairs, and computers for replay purposes. Moreover, there are facilities such as fitness center for physiotherapy, training, and recovery. Every football club has several sponsors which contribute to the funding of the team. For instance, the famous brands Adidas and Nike sponsor almost all of the football clubs with their merchandise. Additionally, players are sponsored by various companies for advertising purposes. The contract is one of the most significant factor that contributes in the interest of the player in the team. The most important characteristic of the contract signed by the player is the role and salary. Some types of contracts are transfer, loan, and renew. Finally, the player occupies the main role in the team.

They are mainly defined by their kit number. In addition, there are several positions such as goalkeeper, defenders, midfielders, and attackers.

## II. Entities

### 1-Staff:

In a football club, there are several job positions for the staff members, for instance, manager, assistant manager, chief analyst, fitness coach, nutritionist, physiotherapist, scout, and each position have a specific salary. They are distinguished by their name, id, address, and phone number. Staff are organized according to which department they work for. In addition, players are supervised by the staff mentioned above.

### 2-Ticket:

The ticket is used to identify the availability of seats in the stadium. Furthermore, there are several types of tickets each of which has a certain price, and they are bought from the stadium. Additionally, the ticket provides the buyer with a certain ticket identification number which represents which seat is reserved, and the date of game.

### 3-Team:

Most major cities in the world are represented by a football team. The name chosen for a certain team has a unique meaning. In the football league, the team's rank is related to the game victories or defeats. Most of the football teams represent sponsors which contributes assistance to the team in several aspects. Each team consists of several divisions, where each division has its own stadium that they train or play games in.

### 4-Stadium:

Every football club has a main stadium which has a unique name and a location which represents the team. The capacity of the stadium differs from one to another, for instance, the maximum number of seats varies between stadiums. The stadium consists of several departments and has various equipment's. Every stadium requires maintenance in order to

stay functional. The stadium also has a contact number in order to communicate with fans for several purposes like summer camps, tours, and information concerning the schedule.

**5-Department:**

The stadium of a football academy consists of various departments, where each one has a role. Departments are defined by a specific number and name. People can contact a particular department by their fixed extension.

**6-Equipement:**

The equipment in the stadium comprise of several types, each one has a certain identification number. In addition, the equipment is identified by their brand. Moreover, the quantity purchased, and cost of such equipment's are stored on a certain record.

**7-Sponsors:**

Most important football academies have several sponsors which help them to improve and grow internationally. Sponsors are recognized by their name and type. Moreover, most sponsors have a website that provide the location of the company. Furthermore, there is a record about when the deal was done between the club and the company.

**8-Contract:**

In every football club, players sign a contract which includes the information about the contract duration, player salary, and the date when the contract was made. Additionally, there are several types of contract like deals with staff members, the factories that provide the club with equipment, and the sponsors. The role is related to each member in the club, for example, the position of the player in the roster of the team or the job title of each staff member. Moreover, the settlement includes additional fees that are paid by the club.

**9-Schedule:**

The schedule of each players or staff members is composed of a start time, break hours, and end time. The staff are responsible to responsible to organize the timing of the schedule. Moreover, they arrange the timing for specific meetings.

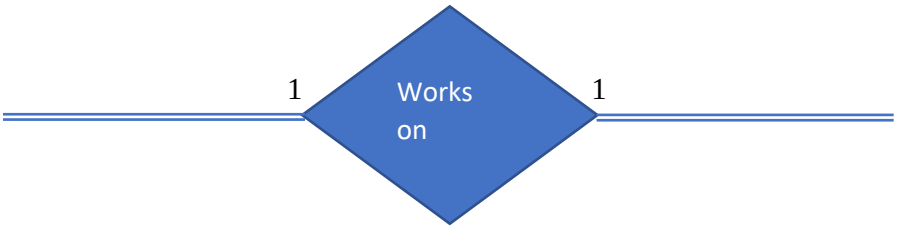
**10-Player:**

Every football player in any club has a remarkable kit number that has a meaning for him. On every jersey in the team, the kit number and the players' name are written on it. Moreover, players have different nationality where they represent their own country. There are records stored in a specific department about the birth date, address, and phone number for every player on the roster. In the team, each player has a specified position such as goalkeeper, defender, middle fielder, and attacker. Some sponsors pay specific players for advertising purposes.

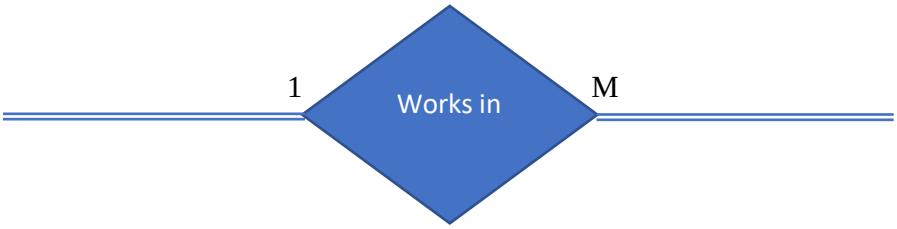
**11-Locker:**

Each player owns a locker which has a unique id, code to access it, and status to check if the locker is occupied or not.

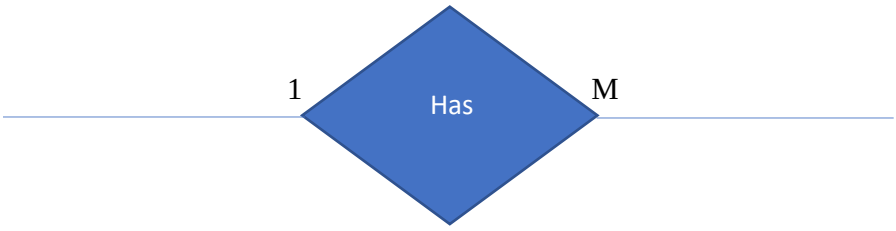
## III. Relationships



One staff can “work on” one of the schedule. Hence, the participation is total on both sides of the relation, since every staff member is ready to “work on” a certain schedule, and the schedule is created for each staff member.

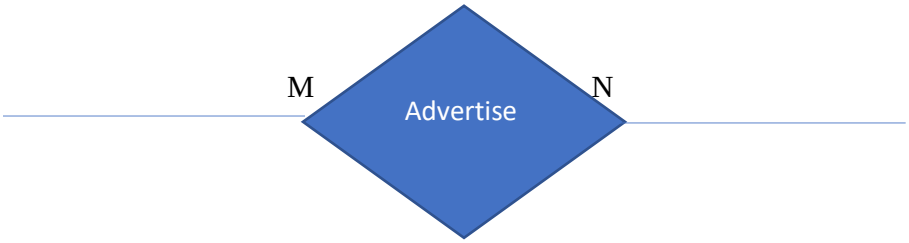



Many staff can “work in” many departments according to the department number and the staff title. The total participation is total on both sides of the relation.

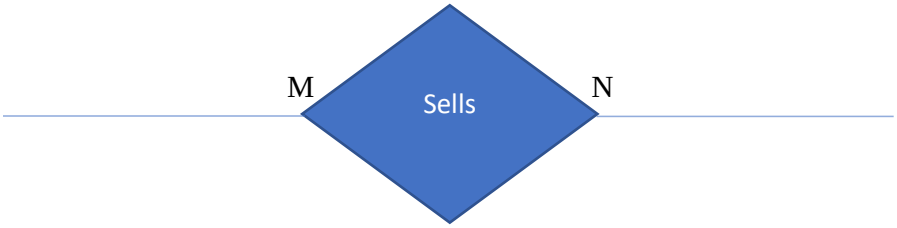



One department can “have many” equipment’s, according to the department number and equipment id.

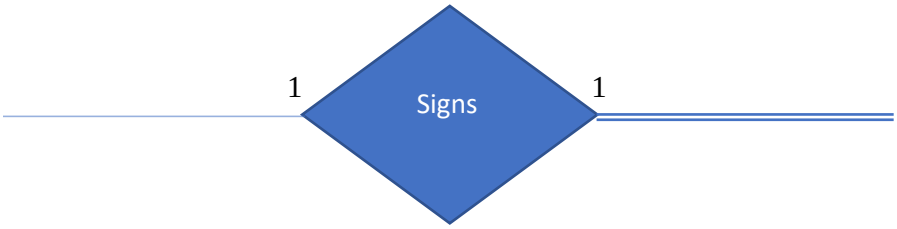

Many football teams “play in” one stadium, since multiple teams can compete against each other on one stadium.



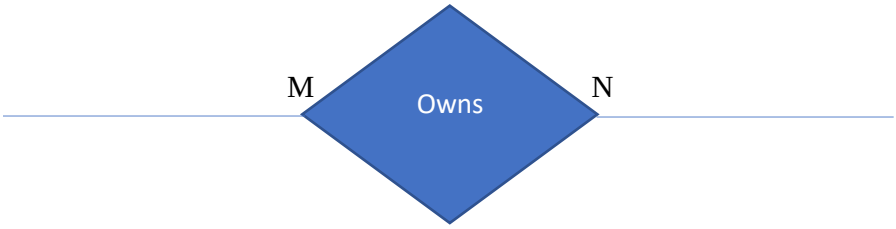

Many stadiums “advertise” many sponsors, since most sponsors get their ADS and merch through the Stadium commercials.



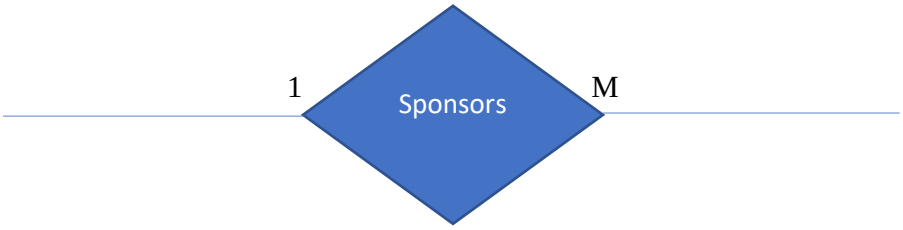
All the tickets of the matches are sold to many stadiums according to their price and their match day.




One player must “sign” only one contract in order to play with the team. There is only one total participation at the side of the player entity.




Many players can “own” many lockers according to their kit number and locker id.




Some of the players can be “sponsored” by a sponsor according to the sponsor name and the player name.

## IV. ER to relational mapping:

**Step 1: Mapping of regular Entity types:**

**Department:**

| Dnum | Extension | Location | Name |
|---|---|---|---|

There are neither multi-valued attributes nor foreign keys in this relation. Consequently, all of its attributes appears in this schema. The Dnum is the primary key for this relation.

**Locker:**

| Locker_ID | Code | Status |
|---|---|---|

There are neither multi-valued attributes nor foreign keys in this relation. Consequently, all of its attributes appears in this schema. The Locker_ID is the primary key for this relation.

**Equipment:**

| Eq_ID | Type | Brand | Cost | Quantity |
|---|---|---|---|---|

There are neither multi-valued attributes nor foreign keys in this relation. Thus, all of its attributes appears in this schema. The Eq_ID is the primary key for this relation.

**Stadium:**

| St_name | Location | Number of seats | Match day | Contact Information |
|---|---|---|---|---|

There are neither multi-valued attributes nor foreign key in this relation. Thus, all of its attributes appears in this schema. The St_name is the primary key for this relation.

**Ticket:**

| Ticket_ID | Price | Date | Availability |
|---|---|---|---|

There are neither multi-valued attributes nor foreign key in this relation. Thus, all of its attributes appears in this schema. The Ticket_ID is the primary key for this relation.

**Staff:**

| Staff_ID | F_name | M_initial | L_name | Title | Salary | Address | Phone number |
|---|---|---|---|---|---|---|---|

There is only one multi-valued attributes which is phone number, but it does not contain a foreign key in this relation. It has a composite attribute called name of which the set of simple attributes are F_name, M_initial, and L_name. Thus, all of its attributes appears in this schema. The Staff_ID is the primary key for this relation.

**Team:**

| T_name | City | Rank |
|---|---|---|

There are neither multi-valued attributes nor foreign key in this relation. Thus, all of its attributes appears in this schema. The T_name is the primary key for this relation.

**Player:**

| Kit_number | F_name | M_initial | L_name | Address | Nationality | Position | Birth date |
|---|---|---|---|---|---|---|---|

There is only one multi-valued attributes which is phone number, but it does not contain a foreign key in this relation. It has a composite attribute called name of which the set of

simple attributes are F_name, M_initial, and L_name. Thus, all of its attributes appears in this schema. The Kit_number is the primary key for this relation.

**Sponsor:**

| Sponsor_Name | Type | Location | Website | Date of sponsorship |
|---|---|---|---|---|

There are neither multi-valued attributes nor foreign key in this relation. Thus, all of its attributes appears in this schema. The Sponsor_Name is the primary key for this relation.

**Contract:**

| Contract_ID | Type | Role | Salary | Date | Additional fees |
|---|---|---|---|---|---|

There are neither multi-valued attributes nor foreign key in this relation. Thus, all of its attributes appears in this schema. The Contract_ID is the primary key for this relation.

**Step 2: Mapping of Weak Entity Types:**

**Schedule:**

| Schedule_ID | Start Time | End Time | Break hours |
|---|---|---|---|

The weak entity schedule has neither multi-valued attributes nor foreign keys in this relation. Thus, all of its attributes appear in this schema.

**Step 3: Mapping of binary 1 to 1 relationship:**

**Player:**

| Kit_number | F_name | M_initial | L_name | Address | Nationality | Position | Birth date | Contract_ID | Length |
|---|---|---|---|---|---|---|---|---|---|

The “Sign” relation is the relationship that links the player entity and contract entity. The total participation is at the side of the player entity. It has no relationship attributes. The Contract_ID is a foreign key of the contract entity.

**Staff:**

| Staff_ID | F_name | M_initial | L_name | Title | Salary | Address | Phone number | Number of hours |
|---|---|---|---|---|---|---|---|---|

The “Works on” relation is the relationship that links the staff entity with the weak entity schedule. The total participation is at both sides. In addition, we add to the relation the number of hours which is an attribute of the relation.

**Step 4: Mapping of binary 1 to N relationship:**

**Equipment:**

| Eq_ID | Type | Brand | Cost | Quantity | Dnum |
|---|---|---|---|---|---|

The “Has” relation is the relationship that links the equipment entity with the department entity. It has no relationship attributes. The Dnum is a foreign key of the department entity.

**Team:**

| T_name | City | Rank | St_name |
|---|---|---|---|

The “Play in” relation is the relationship that links the team entity and stadium entity. It has no relationship attributes. The St_name is a foreign key of the stadium entity.

**Player:**

| Kit_number | F_name | M_initial | L_name | Address | Nationality | Position | Birth date | Sponsor_Name |
|---|---|---|---|---|---|---|---|---|

The “Sponsors” relation is the relationship that links the player entity with the sponsor entity. It has no relationship attributes. The Sponsor_Name is a foreign key of the sponsor entity.

**Player:**

| Kit_number | F_name | M_initial | L_name | Address | Nationality | Position | Birth date | T_Name |
|---|---|---|---|---|---|---|---|---|

The “Plays for” relation is the relationship that links the player entity with the team entity. It has no relationship attributes. The T_Name is a foreign key of the sponsor entity.

**Staff:**

| Staff_ID | F_name | M_initial | L_name | Title | Salary | Address | Phone number | Dnum |
|---|---|---|---|---|---|---|---|---|

The “Works in” relation is the relationship that links the staff entity and department entity. It has no relationship attributes. The Dnum is a foreign key of the department entity.

**Step 5: Mapping of binary M to N relationship:**

**Sells:**

| Ticket_ID | Stadium name |
|---|---|

The “Sells” relation is the relationship that links the ticket entity with the stadium entity. It has no relationship attributes. Hence, this relation is composed of the primary keys of the participating entities.

**OWNS:**

| Kit_number | Locker_ID |
|---|---|

The “owns” relation is the relationship that links the locker entity with the player entity. It has no relationship attributes. Hence, this relation is composed of the primary keys of the participating entities.

**Advertises:**

| St_name | Sponsor_name |
|---|---|

The “Advertises” relation is the relationship that links the sponsor entity with the stadium entity. It has no relationship attributes. Hence, this relation is composed of the primary keys of the participating entities.

**Step 6: Mapping of Multi-valued Attributes:**

**Player-Phone-number:**

| Kit_Number | Player-number# |
|---|---|

We need to create a schema construct called player-phone-number to represent the multi-valued attribute phone number. The primary keys of the schema is made up of the player’s primary key, called Kit_Number, and the attribute value Player-number#. The Player-number# attribute represents the player phone number.

**Staff-Phone-Number:**

| Staff_ID | Staff-number# |
|---|---|

We need to create a schema construct called staff-phone-number to represent the multi-valued attribute phone number. The primary keys of the schema is made up of the staff’s primary key, called Staff_ID, and the attribute value Staff-number#. The Staff-number# attribute represents the staff phone number.

**Step 7: Mapping of N-ary relationship:**

In the seventh step, we map the N-ary relationship types. To accomplish that, we create a new schema that takes the name of the relation. The schema’s attributes consist of the primary keys of every entity connected by this relation. The extra attributes are the relational attributes of the N-ary relation that is being mapped. However, step 7 is not applicable here.

**Final Display:**

**Ticket:**

| Ticket_ID | Price | Match Date | Availability |
|---|---|---|---|

**Team:**

| Name | City | Rank | Stadium Name |
|---|---|---|---|

**Staff-Phone-Number**

| Staff_ID | Phone Number |
|---|---|

**Staff:**

| ID | Title | FName | M_Initial | LName | Address | Salary | D_Num |
|---|---|---|---|---|---|---|---|

**Stadium:**

| Name | Location | Contact_Information | Match_Date | Number_Of_Seats |
|---|---|---|---|---|

**Sponsor:**

| Name | Type | Location | Date_Of_Sponsorship | Website |
|---|---|---|---|---|

**Sells:**

| Stadium_Name | Ticket_ID | Ticket_Type |
|---|---|---|

**Player:**

| Kit_Number | FName | Mid_In | LName | Nat | Birth_Date | Position | Loc | Spons_name | T_Name |
|---|---|---|---|---|---|---|---|---|---|

**Schedule:**

| Start_Time | End_Time | Break_Hours | Schedule_ID | Staff_ID |
|---|---|---|---|---|

**Player-Phone-Number:**

| Kit_N | Phone_Num |
|---|---|

**Locker:**

| ID | Code | Status |
|---|---|---|

**Equipment:**

| Quantity | Eq_ID | Type | Cost | Brand | Dep_Num |
|---|---|---|---|---|---|

**Department:**

| D_Number | Extension | Name | Location |
|---|---|---|---|

**Contract:**

| Type | Salary | Role | D_O_S | Add_Fees | Contract_ID | Length | Kit_Num |
|---|---|---|---|---|---|---|---|

**Advertises:**

| St_Name | Sponsor_Name |
|---|---|

# V. Table Structure for the Athletic Club Database:

1. Table Structure for the “TICKETS”:

```
CREATE TABLE "NAAMANIHADI"."TICKET"
  (       "TICKET_ID" NUMBER NOT NULL ENABLE,
          "PRICE" NUMBER NOT NULL ENABLE,
          "MATCH_DATE" DATE NOT NULL ENABLE,
          "AVAILABILITY" CHAR (1 BYTE) NOT NULL ENABLE,
           CONSTRAINT "TICKET_PK" PRIMARY KEY ("TICKET_ID")
   );
```

2. Table Structure for the “TEAM”:

```
CREATE TABLE "NAAMANIHADI"."TEAM"
  (       "NAME" VARCHAR2(20 BYTE) NOT NULL ENABLE,
          "CITY" CHAR (20 BYTE) NOT NULL ENABLE,
          "RANK" NUMBER (*,0) NOT NULL ENABLE,
          "STADIUM_NAME" CHAR (40 BYTE) NOT NULL ENABLE,
           PRIMARY KEY ("NAME")
                   CONSTRAINT "FK_T" FOREIGN KEY ("STADIUM_NAME")
            REFERENCES "NAAMANIHADI"."STADIUM" ("NAME") ENABLE
  );
```

3. Table Structure for the “STAFF_PHONE_NUMBER”:

```
CREATE TABLE "NAAMANIHADI"."STAFF_PHONE_NUMBER"
  (       "STAFFID" NUMBER NOT NULL ENABLE,
          "PHONE_NUMBER" VARCHAR2(20 BYTE) NOT NULL ENABLE,
           CONSTRAINT "STAFF_PHONE_NUMBER_PK" PRIMARY KEY ("STAFFID",
"PHONE_NUMBER")
CONSTRAINT "FK_SPH" FOREIGN KEY ("STAFFID")
           REFERENCES "NAAMANIHADI"."STAFF" ("ID") ENABLE
  );
```

4. Table Structure for the “STAFF”:

```
CREATE TABLE "NAAMANIHADI"."STAFF"
  (       "ID" NUMBER NOT NULL ENABLE,
          "TITLE" CHAR (20 BYTE) NOT NULL ENABLE,
          "FNAME" CHAR (10 BYTE) NOT NULL ENABLE,
```

```
        "M_INITIAL" CHAR (2 BYTE) NOT NULL ENABLE,
        "LNAME" CHAR (10 BYTE) NOT NULL ENABLE,
        "ADDRESS" VARCHAR2(60 BYTE) NOT NULL ENABLE,
        "SALARY" VARCHAR2(20 BYTE) NOT NULL ENABLE,
        "D_NUM" VARCHAR2(20 BYTE) NOT NULL ENABLE,
         CONSTRAINT "STAFF_PK" PRIMARY KEY ("ID")
         CONSTRAINT "PK_SS1" FOREIGN KEY ("D_NUM")
                REFERENCES "NAAMANIHADI"."DEPARTMENT" ("D_NUMBER") ENABLE
  );
```

5. Table Structure for the “STADIUM”:

```
CREATE TABLE "NAAMANIHADI"."STADIUM"
  (     "NAME" CHAR (40 BYTE) NOT NULL ENABLE,
        "LOCATION" VARCHAR2(20 BYTE) NOT NULL ENABLE,
        "CONTACT_INFORMATION" VARCHAR2(20 BYTE),
        "MATCH_DAY" DATE NOT NULL ENABLE,
        "NUMBER_OF_SEATS" NUMBER (*,0) NOT NULL ENABLE,
         CONSTRAINT "STADIUM_PK" PRIMARY KEY ("NAME")
);
```

6. Table Structure for the “SPONSOR”:

```
CREATE TABLE "NAAMANIHADI"."SPONSOR"
  (     "NAME" CHAR (20 BYTE) NOT NULL ENABLE,
        "TYPE" CHAR (20 BYTE) NOT NULL ENABLE,
        "LOCATION" VARCHAR2(20 BYTE) NOT NULL ENABLE,
        "DATE_OF_SPONSORSHIP" DATE NOT NULL ENABLE,
        "WEBSITE" VARCHAR2(30 BYTE),
         CONSTRAINT "SPONSOR_PK" PRIMARY KEY ("NAME") );
```

7. Table Structure for “SELLS”:

```
CREATE TABLE "NAAMANIHADI"."SELLS"
  (     "NAME" CHAR (40 BYTE) NOT NULL ENABLE,
        "TICKET_ID" NUMBER (*,0) NOT NULL ENABLE,
        "TICKET_TYPE" VARCHAR2(20 BYTE) NOT NULL ENABLE,
         CONSTRAINT "TABLE1_PK" PRIMARY KEY ("NAME", "TICKET_ID")
FOREIGN KEY ("NAME")
          REFERENCES "NAAMANIHADI"."STADIUM" ("NAME") ENABLE,
         FOREIGN KEY ("TICKET_ID")
```

```
        REFERENCES "NAAMANIHADI"."TICKET" ("TICKET_ID") ENABLE
  );
```

8. Table Structure for the “SCHEDULE”:

```
CREATE TABLE "NAAMANIHADI"."SCHEDULE"
  (     "START_TIME" VARCHAR2(10 BYTE) NOT NULL ENABLE,
        "END_TIME" VARCHAR2(10 BYTE) NOT NULL ENABLE,
        "BREAK_HOURS" NUMBER (*,0) NOT NULL ENABLE,
        "SCHEDULE_ID" NUMBER (*,0) NOT NULL ENABLE,
        "STAFF_ID" NUMBER,
         CONSTRAINT "STAFF_FK" FOREIGN KEY ("SCHEDULE_ID")
          REFERENCES "NAAMANIHADI"."STAFF" ("ID") ENABLE,
         CONSTRAINT "FK_SCH" FOREIGN KEY ("STAFF_ID")
          REFERENCES "NAAMANIHADI"."STAFF" ("ID") ENABLE
  );
```

9. Table Structure for the “PLAYER”:

```
CREATE TABLE "NAAMANIHADI"."PLAYER1"
  (     "KIT_NUMBER" NUMBER (*,0) NOT NULL ENABLE,
        "FNAME" CHAR (30 BYTE) NOT NULL ENABLE,
        "MIDDLE_INITIAL" CHAR (2 BYTE) NOT NULL ENABLE,
        "LNAME" VARCHAR2(30 BYTE) NOT NULL ENABLE,
        "NATIONALITY" CHAR (20 BYTE) NOT NULL ENABLE,
        "BIRTH_DATE" DATE NOT NULL ENABLE,
        "POSITION" CHAR (3 BYTE) NOT NULL ENABLE,
        "LOCATION" VARCHAR2(40 BYTE) NOT NULL ENABLE,
        "SPONSOR_NAME" CHAR (20 BYTE) NOT NULL ENABLE,
"T_NAME" VARCHAR2(20 BYTE) NOT NULL ENABLE,
         CONSTRAINT "PLAYER1_PK" PRIMARY KEY ("KIT_NUMBER")
CONSTRAINT "FK_S" FOREIGN KEY ("SPONSOR_NAME")
          REFERENCES "NAAMANIHADI"."SPONSOR" ("NAME") ENABLE,
         CONSTRAINT "X_FK" FOREIGN KEY ("T_NAME")
          REFERENCES "NAAMANIHADI"."TEAM" ("NAME") ENABLE
  );
```

10. Table Structure for “PLAYER_PHONE_NUMBER”:

```
CREATE TABLE "NAAMANIHADI"."PLAYER_PHONE_NUMBER"
  (       "KIT_N" NUMBER (*,0) NOT NULL ENABLE,
          "PHONE_NUM" VARCHAR2(20 BYTE) NOT NULL ENABLE,
           CONSTRAINT "PLAYER_PHONE_NUMBER_PK" PRIMARY KEY ("KIT_N",
"PHONE_NUM")
           CONSTRAINT "FK_PH" FOREIGN KEY ("KIT_N")
            REFERENCES "NAAMANIHADI"."PLAYER1" ("KIT_NUMBER") ENABLE
  );
```

## 11. Table Structure for “OWNS”:

```
CREATE TABLE "NAAMANIHADI"."OWNS"
  (       "KIT_NUMBER" NUMBER (*,0) NOT NULL ENABLE,
          "LOCKER_ID" NUMBER NOT NULL ENABLE,
           CONSTRAINT "OWNS_PK" PRIMARY KEY ("KIT_NUMBER", "LOCKER_ID")
CONSTRAINT "L_FK" FOREIGN KEY ("LOCKER_ID")
            REFERENCES "NAAMANIHADI"."LOCKER" ("ID") ENABLE,
           CONSTRAINT "P_FK" FOREIGN KEY ("KIT_NUMBER")
            REFERENCES "NAAMANIHADI"."PLAYER1" ("KIT_NUMBER") ENABLE
);
```

## 12. Table Structure for “LOCKER”:

```
CREATE TABLE "NAAMANIHADI"."LOCKER"
  (       "ID" NUMBER NOT NULL ENABLE,
          "CODE" VARCHAR2(10 BYTE) NOT NULL ENABLE,
          "STATUS" CHAR (10 BYTE) NOT NULL ENABLE,
           CONSTRAINT "LOCKER_PK" PRIMARY KEY ("ID")
);
```

## 13. Table Structure for “EQUIPMENT”:

```
CREATE TABLE "NAAMANIHADI"."EQUIPMENT"
  (       "QUANTITY" VARCHAR2(20 BYTE) NOT NULL ENABLE,
          "EQ_ID" VARCHAR2(20 BYTE) NOT NULL ENABLE,
          "TYPE" VARCHAR2(20 BYTE) NOT NULL ENABLE,
          "COST" VARCHAR2(20 BYTE) NOT NULL ENABLE,
          "BRAND" VARCHAR2(20 BYTE) NOT NULL ENABLE,
          "DEP_NUM" VARCHAR2(20 BYTE),
           CONSTRAINT "EQUIPMENT_PK" PRIMARY KEY ("EQ_ID")
```

```
        CONSTRAINT "FK_EQ" FOREIGN KEY ("DEP_NUM")
         REFERENCES "NAAMANIHADI"."DEPARTMENT" ("D_NUMBER") ENABLE
  );
```

## 14. Table Structure for the "DEPARTMENT":

```
CREATE TABLE "NAAMANIHADI"."DEPARTMENT"
  (     "D_NUMBER" VARCHAR2(20 BYTE) NOT NULL ENABLE,
        "EXTENSION" VARCHAR2(20 BYTE) NOT NULL ENABLE,
        "NAME" VARCHAR2(20 BYTE) NOT NULL ENABLE,
        "LOCATION" VARCHAR2(20 BYTE) NOT NULL ENABLE,
         CONSTRAINT "DEPARTMENT_PK" PRIMARY KEY ("D_NUMBER")
);
```

## 15. Table Structure of the "CONTRACT":

```
CREATE TABLE "NAAMANIHADI"."CONTRACT"
  (     "TYPE" CHAR (10 BYTE) NOT NULL ENABLE,
        "SALARY" NUMBER NOT NULL ENABLE,
        "ROLE" CHAR (10 BYTE) NOT NULL ENABLE,
        "DATE_OF_SIGNING" DATE NOT NULL ENABLE,
        "ADDITIONAL_FEES" NUMBER,
        "CONTRACT_ID" VARCHAR2(20 BYTE) NOT NULL ENABLE,
        "LENGTH" NUMBER,
        "KIT_NUM" NUMBER (*,0),
         CONSTRAINT "CONTRACT_PK" PRIMARY KEY ("CONTRACT_ID")
         CONSTRAINT "FK_P" FOREIGN KEY ("KIT_NUM")
          REFERENCES "NAAMANIHADI"."PLAYER1" ("KIT_NUMBER") ENABLE
  );
```

## 16. Table Structure of "ADVERTISES":

```
CREATE TABLE "NAAMANIHADI"."ADVERTISES"
  (     "ST_NAME" CHAR (40 BYTE) NOT NULL ENABLE,
        "SPONSOR_NAME" CHAR (20 BYTE) NOT NULL ENABLE,
         CONSTRAINT "ADVERTISES_PK" PRIMARY KEY ("ST_NAME", "SPONSOR_NAME")
         FOREIGN KEY ("ST_NAME")
          REFERENCES "NAAMANIHADI"."STADIUM" ("NAME") ENABLE,
         FOREIGN KEY ("SPONSOR_NAME")
          REFERENCES "NAAMANIHADI"."SPONSOR" ("NAME") ENABLE
  );
```

## VI. Table Description:

1. Table “TICKET”:

   Describe TICKET;

| COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|
| TICKET_ID | NUMBER | No | (null) | 1 | (null) |
| PRICE | NUMBER | No | (null) | 2 | (null) |
| MATCH_DATE | DATE | No | (null) | 3 | (null) |
| AVAILABILITY | CHAR(1 BYTE) | No | (null) | 4 | (null) |

2. Table “TEAM”:

   Describe TEAM;

| COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|
| NAME | VARCHAR2(20 BYTE) | No | (null) | 1 | (null) |
| CITY | CHAR(20 BYTE) | No | (null) | 2 | (null) |
| RANK | NUMBER(38,0) | No | (null) | 3 | (null) |
| STADIUM_NAME | CHAR(40 BYTE) | No | (null) | 4 | (null) |

3. Table “STAFF_PHONE_NUMBER”:

   Describe STAFF_PHONE_NUMBER;

| COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|
| STAFFID | NUMBER | No | (null) | 1 | (null) |
| PHONE_NUMBER | VARCHAR2(20 BYTE) | No | (null) | 2 | (null) |

4. Table “STAFF”:

   Describe STAFF;

| COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|
| ID | NUMBER | No | (null) | 1 | (null) |
| TITLE | CHAR(20 BYTE) | No | (null) | 2 | (null) |
| FNAME | CHAR(10 BYTE) | No | (null) | 3 | (null) |
| M_INITIAL | CHAR(2 BYTE) | No | (null) | 4 | (null) |
| LNAME | CHAR(10 BYTE) | No | (null) | 5 | (null) |
| ADDRESS | VARCHAR2(60 BYTE) | No | (null) | 6 | (null) |
| SALARY | VARCHAR2(20 BYTE) | No | (null) | 7 | (null) |
| D_NUM | VARCHAR2(20 BYTE) | No | (null) | 8 | (null) |

5. Table “STADIUM”:

   Describe STADIUM;

| COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|
| NAME | CHAR(40 BYTE) | No | (null) | 1 | (null) |
| LOCATION | VARCHAR2(20 BYTE) | No | (null) | 2 | (null) |
| CONTACT_INFORMATION | VARCHAR2(20 BYTE) | Yes | (null) | 3 | (null) |
| MATCH_DAY | DATE | No | (null) | 4 | (null) |
| NUMBER_OF_SEATS | NUMBER(38,0) | No | (null) | 5 | (null) |

6. Table “SPONSOR”:

Describe SPONSOR;

| COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|
| NAME | CHAR(20 BYTE) | No | (null) | 1 | (null) |
| TYPE | CHAR(20 BYTE) | No | (null) | 2 | (null) |
| LOCATION | VARCHAR2(20 BYTE) | No | (null) | 3 | (null) |
| DATE_OF_SPONSORSHIP | DATE | No | (null) | 4 | (null) |
| WEBSITE | VARCHAR2(30 BYTE) | Yes | (null) | 5 | (null) |

7. Table “SELLS”:

Describe SELLS;

| COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|
| NAME | CHAR(40 BYTE) | No | (null) | 1 | (null) |
| TICKET_ID | NUMBER(38,0) | No | (null) | 2 | (null) |
| TICKET_TYPE | VARCHAR2(20 BYTE) | No | (null) | 3 | (null) |

8. Table “PLAYER”:

Describe PLAYER;

| COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|
| KIT_NUMBER | NUMBER(38,0) | No | (null) | 1 | (null) |
| FNAME | CHAR(30 BYTE) | No | (null) | 2 | (null) |
| MIDDLE_INITIAL | CHAR(2 BYTE) | No | (null) | 3 | (null) |
| LNAME | VARCHAR2(30 BYTE) | No | (null) | 4 | (null) |
| NATIONALITY | CHAR(20 BYTE) | No | (null) | 5 | (null) |
| BIRTH_DATE | DATE | No | (null) | 6 | (null) |
| POSITION | CHAR(3 BYTE) | No | (null) | 7 | (null) |
| LOCATION | VARCHAR2(40 BYTE) | No | (null) | 8 | (null) |
| SPONSOR_NAME | CHAR(20 BYTE) | No | (null) | 9 | (null) |
| T_NAME | VARCHAR2(20 BYTE) | No | (null) | 10 | (null) |

9. Table “SCHEDULE”:

Describe SCHEDULE;

| COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|
| START_TIME | VARCHAR2(10 BYTE) | No | (null) | 1 | (null) |
| END_TIME | VARCHAR2(10 BYTE) | No | (null) | 2 | (null) |
| BREAK_HOURS | NUMBER(38,0) | No | (null) | 3 | (null) |
| SCHEDULE_ID | NUMBER(38,0) | No | (null) | 4 | (null) |
| STAFF_ID | NUMBER | Yes | (null) | 5 | (null) |

10. Table “PLAYER_PHONE_NUMBER”:

Describe PLAYER_PHONE_NUMBER;

| COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|
| KIT_N | NUMBER(38,0) | No | (null) | 1 | (null) |
| PHONE_NUM | VARCHAR2(20 BYTE) | No | (null) | 2 | (null) |

11. Table “OWNS”:

Describe OWNS;

| COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|
| KIT_NUMBER | NUMBER(38,0) | No | (null) | 1 | (null) |
| LOCKER_ID | NUMBER | No | (null) | 2 | (null) |

12. Table “LOCKER”:

Describe LOCKER;

| COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|
| ID | NUMBER | No | (null) | 1 | (null) |
| CODE | VARCHAR2(10 BYTE) | No | (null) | 2 | (null) |
| STATUS | CHAR(10 BYTE) | No | (null) | 3 | (null) |

13. Table “EQUIPMENT”:

Describe EQUIPMENT;

| COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|
| QUANTITY | VARCHAR2(20 BYTE) | No | (null) | 1 | (null) |
| EQ_ID | VARCHAR2(20 BYTE) | No | (null) | 2 | (null) |
| TYPE | VARCHAR2(20 BYTE) | No | (null) | 3 | (null) |
| COST | VARCHAR2(20 BYTE) | No | (null) | 4 | (null) |
| BRAND | VARCHAR2(20 BYTE) | No | (null) | 5 | (null) |
| DEP_NUM | VARCHAR2(20 BYTE) | Yes | (null) | 6 | (null) |

14. Table “DEPARTMENT”:

Describe DEPARTMENT;

| COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|
| D_NUMBER | VARCHAR2(20 BYTE) | No | (null) | 1 | (null) |
| EXTENSION | VARCHAR2(20 BYTE) | No | (null) | 2 | (null) |
| NAME | VARCHAR2(20 BYTE) | No | (null) | 3 | (null) |
| LOCATION | VARCHAR2(20 BYTE) | No | (null) | 4 | (null) |

15. Table “CONTRACT”:

Describe CONTRACT;

| COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|
| TYPE | CHAR(10 BYTE) | No | (null) | 1 | (null) |
| SALARY | NUMBER | No | (null) | 2 | (null) |
| ROLE | CHAR(10 BYTE) | No | (null) | 3 | (null) |
| DATE_OF_SIGNING | DATE | No | (null) | 4 | (null) |
| ADDITIONAL_FEES | NUMBER | Yes | (null) | 5 | (null) |
| CONTRACT_ID | VARCHAR2(20 BYTE) | No | (null) | 6 | (null) |
| LENGTH | NUMBER | Yes | (null) | 7 | (null) |
| KIT_NUM | NUMBER(38,0) | Yes | (null) | 8 | (null) |

16. Table “ADVERTISES”:

Describe ADVERTISES;

| COLUMN_NAME | DATA_TYPE | NULLABLE | DATA_DEFAULT | COLUMN_ID | COMMENTS |
|---|---|---|---|---|---|
| ST_NAME | CHAR(40 BYTE) | No | (null) | 1 | (null) |
| SPONSOR_NAME | CHAR(20 BYTE) | No | (null) | 2 | (null) |

# VII. Dumping data for created tables:

1. Dumping data to OWNS:

```
INSERT INTO "NAAMANIHADI"."OWNS" (KIT_NUMBER, LOCKER_ID) VALUES ('9', '1000')
INSERT INTO "NAAMANIHADI"."OWNS" (KIT_NUMBER, LOCKER_ID) VALUES ('10', '1100')
INSERT INTO "NAAMANIHADI"."OWNS" (KIT_NUMBER, LOCKER_ID) VALUES ('6', '1200')
INSERT INTO "NAAMANIHADI"."OWNS" (KIT_NUMBER, LOCKER_ID) VALUES ('1', '1300')
INSERT INTO "NAAMANIHADI"."OWNS" (KIT_NUMBER, LOCKER_ID) VALUES ('2', '1400')
INSERT INTO "NAAMANIHADI"."OWNS" (KIT_NUMBER, LOCKER_ID) VALUES ('3', '1500')
INSERT INTO "NAAMANIHADI"."OWNS" (KIT_NUMBER, LOCKER_ID) VALUES ('4', '2200')
INSERT INTO "NAAMANIHADI"."OWNS" (KIT_NUMBER, LOCKER_ID) VALUES ('5', '3300')
INSERT INTO "NAAMANIHADI"."OWNS" (KIT_NUMBER, LOCKER_ID) VALUES ('7', '4400')
INSERT INTO "NAAMANIHADI"."OWNS" (KIT_NUMBER, LOCKER_ID) VALUES ('8', '1900')
```

2. Dumping data to TICKET:

INSERT INTO "NAAMANIHADI"."TICKET" (TICKET_ID, PRICE, MATCH_DATE, AVAILABILITY) VALUES ('100', '100', TO_DATE('2019-12-18 14:02:58', 'YYYY-MM-DD HH24:MI:SS'), 'Y')

INSERT INTO "NAAMANIHADI"."TICKET" (TICKET_ID, PRICE, MATCH_DATE, AVAILABILITY) VALUES ('200', '50', TO_DATE('2021-12-16 14:03:06', 'YYYY-MM-DD HH24:MI:SS'), 'Y')

INSERT INTO "NAAMANIHADI"."TICKET" (TICKET_ID, PRICE, MATCH_DATE, AVAILABILITY) VALUES ('99', '100', TO_DATE('2019-06-04 14:03:11', 'YYYY-MM-DD HH24:MI:SS'), 'N')

INSERT INTO "NAAMANIHADI"."TICKET" (TICKET_ID, PRICE, MATCH_DATE, AVAILABILITY) VALUES ('33', '200', TO_DATE('2020-12-11 14:03:19', 'YYYY-MM-DD HH24:MI:SS'), 'Y')

INSERT INTO "NAAMANIHADI"."TICKET" (TICKET_ID, PRICE, MATCH_DATE, AVAILABILITY) VALUES ('211', '50', TO_DATE('2023-12-22 14:03:25', 'YYYY-MM-DD HH24:MI:SS'), 'Y')

INSERT INTO "NAAMANIHADI"."TICKET" (TICKET_ID, PRICE, MATCH_DATE, AVAILABILITY) VALUES ('554', '50', TO_DATE('2020-01-01 14:03:32', 'YYYY-MM-DD HH24:MI:SS'), 'Y')

INSERT INTO "NAAMANIHADI"."TICKET" (TICKET_ID, PRICE, MATCH_DATE, AVAILABILITY) VALUES ('11', '200', TO_DATE('2019-12-29 14:03:49', 'YYYY-MM-DD HH24:MI:SS'), 'N')

INSERT INTO "NAAMANIHADI"."TICKET" (TICKET_ID, PRICE, MATCH_DATE, AVAILABILITY) VALUES ('87', '100', TO_DATE('2014-12-18 14:03:54', 'YYYY-MM-DD HH24:MI:SS'), 'N')

INSERT INTO "NAAMANIHADI"."TICKET" (TICKET_ID, PRICE, MATCH_DATE, AVAILABILITY) VALUES ('197', '50', TO_DATE('2016-07-09 14:04:00', 'YYYY-MM-DD HH24:MI:SS'), 'N')

INSERT INTO "NAAMANIHADI"."TICKET" (TICKET_ID, PRICE, MATCH_DATE, AVAILABILITY) VALUES ('44', '200', TO_DATE('2019-08-06 14:04:11', 'YYYY-MM-DD HH24:MI:SS'), 'N')

3. Dumping data to “STAFF”:

INSERT INTO "NAAMANIHADI"."STAFF" (ID, TITLE, FNAME, M_INITIAL, LNAME, ADDRESS, SALARY, PHONE_NUMBER) VALUES ('2000', 'Manager', 'Frank', 'J.', 'Lampard', '10 Nevis Avenue, Belfast, BT4 3AE ', '10m $', '+44 3069 990378')

INSERT INTO "NAAMANIHADI"."STAFF" (ID, TITLE, FNAME, M_INITIAL, LNAME, ADDRESS, SALARY, PHONE_NUMBER) VALUES ('2001', 'Owner', 'Hadi', 'A.', 'Naamani', '46 Old Church Rd, London, E4 8DB', '100m $', '+44 3069 990111')

INSERT INTO "NAAMANIHADI"."STAFF" (ID, TITLE, FNAME, M_INITIAL, LNAME, ADDRESS, SALARY, PHONE_NUMBER) VALUES ('2009', 'Cleaner', 'Ahmad', 'A.', 'Shehade', '17 Swan Mead, Luton, LU4 0YP', '12k $', '+44 3069 990222')

INSERT INTO "NAAMANIHADI"."STAFF" (ID, TITLE, FNAME, M_INITIAL, LNAME, ADDRESS, SALARY, PHONE_NUMBER) VALUES ('2483', 'Assistant Manager', 'Ralph', 'A.', 'Bou Jawde', 'The Studio, 7c, Mile End Rd, Norwich, NR4 7QX', '5m $', '+44 3069 990333')

INSERT INTO "NAAMANIHADI"."STAFF" (ID, TITLE, FNAME, M_INITIAL, LNAME, ADDRESS, SALARY, PHONE_NUMBER) VALUES ('1111', 'Physiotherapist', 'Phil', 'J.', 'Jones', 'Copyground Lane, High Wycombe, HP12 3HE', '2m $', '+44 3069 990374')

INSERT INTO "NAAMANIHADI"."STAFF" (ID, TITLE, FNAME, M_INITIAL, LNAME, ADDRESS, SALARY, PHONE_NUMBER) VALUES ('3333', 'Coach', 'Moussa', 'A.', 'Harkous', '14 Rhuddlan Way, Kidderminster, DY10 1YH ', '5m $', '+44 3069 990444')

INSERT INTO "NAAMANIHADI"."STAFF" (ID, TITLE, FNAME, M_INITIAL, LNAME, ADDRESS, SALARY, PHONE_NUMBER) VALUES ('2222', 'Nutrionist', 'Chris', 'W.', 'Shalhoub', '13-16, Howlett Way, Thetford, IP24 1HZ', '3m $', '+44 3069 990555')

INSERT INTO "NAAMANIHADI"."STAFF" (ID, TITLE, FNAME, M_INITIAL, LNAME, ADDRESS, SALARY, PHONE_NUMBER) VALUES ('2019', 'Chef', 'Ali', 'A.', 'Sheib', '21 Armley Grange Drive, Leeds, LS12 3QH', '4m $', '+44 3069 990999')

INSERT INTO "NAAMANIHADI"."STAFF" (ID, TITLE, FNAME, M_INITIAL, LNAME, ADDRESS, SALARY, PHONE_NUMBER) VALUES ('4432', 'Masseur', 'Mohamad', 'M.', 'Mohamad', '128 Harbour St, Irvine, KA12 8PZ', '1m $', '+44 3069 990888')

INSERT INTO "NAAMANIHADI"."STAFF" (ID, TITLE, FNAME, M_INITIAL, LNAME, ADDRESS, SALARY, PHONE_NUMBER) VALUES ('4444', 'Goalkeeping Coach', 'Mounir', 'M.', 'Mouloudi', 'James St, York, YO10 3WW', '3m $', '+44 3069 990777')

4. Dumping data to Sponsor:

INSERT INTO "NAAMANIHADI"."SPONSOR" (NAME, TYPE, LOCATION, DATE_OF_SPONSORSHIP, WEBSITE) VALUES ('Addidas', 'Full sponsorship', 'London', TO_DATE('2019-12-27 12:37:20', 'YYYY-MM-DD HH24:MI:SS'), 'addidas.com')

INSERT INTO "NAAMANIHADI"."SPONSOR" (NAME, TYPE, LOCATION, DATE_OF_SPONSORSHIP, WEBSITE) VALUES ('Nike', 'Full sponsorship', 'Manchester', TO_DATE('2019-12-21 12:37:25', 'YYYY-MM-DD HH24:MI:SS'), 'nike.com')

INSERT INTO "NAAMANIHADI"."SPONSOR" (NAME, TYPE, LOCATION, DATE_OF_SPONSORSHIP, WEBSITE) VALUES ('Chevrolet', 'Team Sponsorship', 'Bristol', TO_DATE('2014-12-12 12:37:29', 'YYYY-MM-DD HH24:MI:SS'), 'chevrolet.com')

INSERT INTO "NAAMANIHADI"."SPONSOR" (NAME, TYPE, LOCATION, DATE_OF_SPONSORSHIP, WEBSITE) VALUES ('Yokahoma', 'Player Sponsorship', 'Liverpool', TO_DATE('2010-12-02 12:37:34', 'YYYY-MM-DD HH24:MI:SS'), 'yokahoma.com')

INSERT INTO "NAAMANIHADI"."SPONSOR" (NAME, TYPE, LOCATION, DATE_OF_SPONSORSHIP, WEBSITE) VALUES ('Etihad Airways', 'Stadium Sponsorship', 'Newcastle', TO_DATE('2019-12-31 12:37:43', 'YYYY-MM-DD HH24:MI:SS'), 'etihad.com')

INSERT INTO "NAAMANIHADI"."SPONSOR" (NAME, TYPE, LOCATION, DATE_OF_SPONSORSHIP, WEBSITE) VALUES ('Emirates Airways', 'Player Sponsorship', 'York', TO_DATE('2019-12-14 12:37:40', 'YYYY-MM-DD HH24:MI:SS'), 'emirate.com')

INSERT INTO "NAAMANIHADI"."SPONSOR" (NAME, TYPE, LOCATION, DATE_OF_SPONSORSHIP, WEBSITE) VALUES ('Qatar Airways', 'Full Sponsorship', 'Leeds', TO_DATE('2015-12-11 12:37:47', 'YYYY-MM-DD HH24:MI:SS'), 'qatar.com')

INSERT INTO "NAAMANIHADI"."SPONSOR" (NAME, TYPE, LOCATION, DATE_OF_SPONSORSHIP, WEBSITE) VALUES ('AXA', 'Team Sponsorship', 'Cambridge', TO_DATE('2016-12-09 12:37:52', 'YYYY-MM-DD HH24:MI:SS'), 'axa.com')

INSERT INTO "NAAMANIHADI"."SPONSOR" (NAME, TYPE, LOCATION, DATE_OF_SPONSORSHIP, WEBSITE) VALUES ('ManBetX', 'Team Sponsorship', 'Oxford', TO_DATE('2018-12-08 12:37:57', 'YYYY-MM-DD HH24:MI:SS'), 'manbetx.com')

INSERT INTO "NAAMANIHADI"."SPONSOR" (NAME, TYPE, LOCATION, DATE_OF_SPONSORSHIP, WEBSITE) VALUES ('AIA', 'Team Sponsorship', 'Norwich', TO_DATE('2017-12-16 12:38:01', 'YYYY-MM-DD HH24:MI:SS'), 'aia.com')

5. Dumping data to SCHEDULE:

INSERT INTO "NAAMANIHADI"."SCHEDULE" (START_TIME, END_TIME, BREAK_HOURS, SCHEDULE_ID) VALUES ('8:00', '13:00', '1', '2000')

INSERT INTO "NAAMANIHADI"."SCHEDULE" (START_TIME, END_TIME, BREAK_HOURS, SCHEDULE_ID) VALUES ('9:00', '14:00', '2', '2001')

INSERT INTO "NAAMANIHADI"."SCHEDULE" (START_TIME, END_TIME, BREAK_HOURS, SCHEDULE_ID) VALUES ('7:00', '13:00', '3', '2002')

INSERT INTO "NAAMANIHADI"."SCHEDULE" (START_TIME, END_TIME, BREAK_HOURS, SCHEDULE_ID) VALUES ('6:00', '14:00', '2', '2003')

INSERT INTO "NAAMANIHADI"."SCHEDULE" (START_TIME, END_TIME, BREAK_HOURS, SCHEDULE_ID) VALUES ('11:00', '17:00', '3', '2004')

INSERT INTO "NAAMANIHADI"."SCHEDULE" (START_TIME, END_TIME, BREAK_HOURS, SCHEDULE_ID) VALUES ('10:00', '16:00', '2', '2005')

INSERT INTO "NAAMANIHADI"."SCHEDULE" (START_TIME, END_TIME, BREAK_HOURS, SCHEDULE_ID) VALUES ('9:00', '15:00', '1', '2006')

INSERT INTO "NAAMANIHADI"."SCHEDULE" (START_TIME, END_TIME, BREAK_HOURS, SCHEDULE_ID) VALUES ('12:00', '14:00', '0', '2007')

INSERT INTO "NAAMANIHADI"."SCHEDULE" (START_TIME, END_TIME, BREAK_HOURS, SCHEDULE_ID) VALUES ('11:00', '17:00', '2', '2008')

INSERT INTO "NAAMANIHADI"."SCHEDULE" (START_TIME, END_TIME, BREAK_HOURS, SCHEDULE_ID) VALUES ('10:00', '16:00', '1', '2009')

6. Dumping data to PLAYER:

INSERT INTO "NAAMANIHADI"."PLAYER1" (KIT_NUMBER, FNAME, MIDDLE_INITIAL, LNAME, PHONE_NUMBER, NATIONALITY, BIRTH_DATE, POSITION, ADDRESS) VALUES ('9', 'Tammy', 'A.', 'Abraham', '+44 556466543', 'England', TO_DATE('1992-12-11 12:54:10', 'YYYY-MM-DD HH24:MI:SS'), 'ST', 'North London')

INSERT INTO "NAAMANIHADI"."PLAYER1" (KIT_NUMBER, FNAME, MIDDLE_INITIAL, LNAME, PHONE_NUMBER, NATIONALITY, BIRTH_DATE, POSITION, ADDRESS) VALUES ('10', 'Harry', 'B.', 'Kane', '+44 54554234', 'England', TO_DATE('1997-12-13 12:54:18', 'YYYY-MM-DD HH24:MI:SS'), 'ST', 'West London')

INSERT INTO "NAAMANIHADI"."PLAYER1" (KIT_NUMBER, FNAME, MIDDLE_INITIAL, LNAME, PHONE_NUMBER, NATIONALITY, BIRTH_DATE, POSITION, ADDRESS) VALUES ('6', 'Alisson', 'C.', 'Becker', '+44 8567438', 'Brazil', TO_DATE('2000-12-01 12:54:25', 'YYYY-MM-DD HH24:MI:SS'), 'GK', 'Liverpool')

INSERT INTO "NAAMANIHADI"."PLAYER1" (KIT_NUMBER, FNAME, MIDDLE_INITIAL, LNAME, PHONE_NUMBER, NATIONALITY, BIRTH_DATE, POSITION, ADDRESS) VALUES ('1', 'Kepa', 'W.', 'Arizabalaga', '+44 6546332', 'Spain', TO_DATE('1988-12-03 12:54:33', 'YYYY-MM-DD HH24:MI:SS'), 'GK', 'Chelsea')

INSERT INTO "NAAMANIHADI"."PLAYER1" (KIT_NUMBER, FNAME, MIDDLE_INITIAL, LNAME, PHONE_NUMBER, NATIONALITY, BIRTH_DATE, POSITION, ADDRESS) VALUES ('2', 'Antoine', 'E.', 'Rudiger', '+44 5145234', 'Germany', TO_DATE('2002-12-27 12:54:43', 'YYYY-MM-DD HH24:MI:SS'), 'CB', 'Chelsea')

INSERT INTO "NAAMANIHADI"."PLAYER1" (KIT_NUMBER, FNAME, MIDDLE_INITIAL, LNAME, PHONE_NUMBER, NATIONALITY, BIRTH_DATE, POSITION, ADDRESS) VALUES ('3', 'David', 'R.', 'Luiz', '+44 1111111', 'Brazil', TO_DATE('1995-12-23 12:54:51', 'YYYY-MM-DD HH24:MI:SS'), 'CB', 'Arsenal')

INSERT INTO "NAAMANIHADI"."PLAYER1" (KIT_NUMBER, FNAME, MIDDLE_INITIAL, LNAME, PHONE_NUMBER, NATIONALITY, BIRTH_DATE, POSITION, ADDRESS) VALUES ('4', 'Jordan', 'T.', 'Henderson', '+44 4444444', 'England', TO_DATE('1996-12-27 12:55:03', 'YYYY-MM-DD HH24:MI:SS'), 'CM', 'Liverpool')

INSERT INTO "NAAMANIHADI"."PLAYER1" (KIT_NUMBER, FNAME, MIDDLE_INITIAL, LNAME, PHONE_NUMBER, NATIONALITY, BIRTH_DATE, POSITION, ADDRESS) VALUES ('5', 'Jorginho', 'A.', 'Ferella', '+44 12344554', 'Italy', TO_DATE('1993-12-30 12:55:12', 'YYYY-MM-DD HH24:MI:SS'), 'CM', 'Manchester')

INSERT INTO "NAAMANIHADI"."PLAYER1" (KIT_NUMBER, FNAME, MIDDLE_INITIAL, LNAME, PHONE_NUMBER, NATIONALITY, BIRTH_DATE, POSITION, ADDRESS) VALUES ('7', 'Ngolo', 'H.', 'Kante', '+44 3333333', 'France', TO_DATE('1990-12-31 12:55:21', 'YYYY-MM-DD HH24:MI:SS'), 'CDM', 'Norwich')

INSERT INTO "NAAMANIHADI"."PLAYER1" (KIT_NUMBER, FNAME, MIDDLE_INITIAL, LNAME, PHONE_NUMBER, NATIONALITY, BIRTH_DATE, POSITION, ADDRESS) VALUES ('8', 'Danny', 'H.', 'Williams', '+44 22222222', 'England', TO_DATE('2000-06-15 12:55:32', 'YYYY-MM-DD HH24:MI:SS'), 'LW', 'Bristol')

7. Dumping data to LOCKER:

INSERT INTO "NAAMANIHADI"."LOCKER" (ID, CODE, STATUS) VALUES ('1000', '123-321', 'Occupied')

INSERT INTO "NAAMANIHADI"."LOCKER" (ID, CODE, STATUS) VALUES ('1100', '456-654', 'Available')

INSERT INTO "NAAMANIHADI"."LOCKER" (ID, CODE, STATUS) VALUES ('1200', '789-987', 'Occupied')

INSERT INTO "NAAMANIHADI"."LOCKER" (ID, CODE, STATUS) VALUES ('1300', '654-321', 'Available')

INSERT INTO "NAAMANIHADI"."LOCKER" (ID, CODE, STATUS) VALUES ('1400', '456-123', 'Available')

INSERT INTO "NAAMANIHADI"."LOCKER" (ID, CODE, STATUS) VALUES ('1500', '123-456', 'Occupied')

INSERT INTO "NAAMANIHADI"."LOCKER" (ID, CODE, STATUS) VALUES ('2200', '456-789', 'Available')

INSERT INTO "NAAMANIHADI"."LOCKER" (ID, CODE, STATUS) VALUES ('3300', '654-987', 'Available')

INSERT INTO "NAAMANIHADI"."LOCKER" (ID, CODE, STATUS) VALUES ('4400', '000-111', 'Available')

INSERT INTO "NAAMANIHADI"."LOCKER" (ID, CODE, STATUS) VALUES ('1900', '122-211', 'Occupied')

8. Dumping data to Equipment:

INSERT INTO "NAAMANIHADI"."EQUIPMENT" (QUANTITY, EQ_ID, TYPE, COST, BRAND) VALUES ('100', '123-123', 'Shoes', '100$', 'Nike')

INSERT INTO "NAAMANIHADI"."EQUIPMENT" (QUANTITY, EQ_ID, TYPE, COST, BRAND) VALUES ('50', '321-321', 'Ball', '20$', 'Addidas')

INSERT INTO "NAAMANIHADI"."EQUIPMENT" (QUANTITY, EQ_ID, TYPE, COST, BRAND) VALUES ('10', '123-456', 'Goalkeeping gloves', '70$', 'Puma')

INSERT INTO "NAAMANIHADI"."EQUIPMENT" (QUANTITY, EQ_ID, TYPE, COST, BRAND) VALUES ('100', '321-654', 'Shirts', '30$', 'Nike')

INSERT INTO "NAAMANIHADI"."EQUIPMENT" (QUANTITY, EQ_ID, TYPE, COST, BRAND) VALUES ('100', '123-789', 'Cones', '10$', 'Nike')

INSERT INTO "NAAMANIHADI"."EQUIPMENT" (QUANTITY, EQ_ID, TYPE, COST, BRAND) VALUES ('10', '111-000', 'Dummies', '90$', 'Nike')

INSERT INTO "NAAMANIHADI"."EQUIPMENT" (QUANTITY, EQ_ID, TYPE, COST, BRAND) VALUES ('200', '222-111', 'Desk', '110$', 'Steelcase')

INSERT INTO "NAAMANIHADI"."EQUIPMENT" (QUANTITY, EQ_ID, TYPE, COST, BRAND) VALUES ('300', '333-999', 'Chairs', '70$', 'Steelcase')

INSERT INTO "NAAMANIHADI"."EQUIPMENT" (QUANTITY, EQ_ID, TYPE, COST, BRAND) VALUES ('40', '444-666', 'Mop', '15$', 'Vileda')

INSERT INTO "NAAMANIHADI"."EQUIPMENT" (QUANTITY, EQ_ID, TYPE, COST, BRAND) VALUES ('20', '555-555', 'Cooler', '95$', 'Nestle')

9. Dumping data to TEAM:

UPDATE "NAAMANIHADI"."TEAM" SET NAME = 'Chelsea Team A', CITY = 'Chelsea  ', RANK = '3' WHERE

UPDATE "NAAMANIHADI"."TEAM" SET NAME = 'Chelsea Team B', CITY = 'Chelsea  ', RANK = '10'

UPDATE "NAAMANIHADI"."TEAM" SET NAME = 'Chelsea Seniors A', CITY = 'Chelsea  ', RANK = '2'

UPDATE "NAAMANIHADI"."TEAM" SET NAME = 'Chelsea Juniors A', CITY = 'Fulham  ', RANK = '7'

UPDATE "NAAMANIHADI"."TEAM" SET NAME = 'Chelsea Seniors B', CITY = 'Chelsea      ', RANK = '6'

UPDATE "NAAMANIHADI"."TEAM" SET NAME = 'Chelsea Juniors B', CITY = 'Fulham     ', RANK = '9'

UPDATE "NAAMANIHADI"."TEAM" SET NAME = 'Chelsea Youth A', CITY = 'Manchester', RANK = '20'

UPDATE "NAAMANIHADI"."TEAM" SET NAME = 'Chelsea Youth B', CITY = 'Manchester          ', RANK ='33'

10. Dumping data to CONTRACT:

INSERT INTO "NAAMANIHADI"."CONTRACT" (TYPE, SALARY, ROLE, DATE_OF_SIGNING, ADDITIONAL_FEES, CONTRACT_ID) VALUES ('Transfer', '100000', 'Important', TO_DATE('2015-12-10 17:36:14', 'YYYY-MM-DD HH24:MI:SS'), '50000', '201')

INSERT INTO "NAAMANIHADI"."CONTRACT" (TYPE, SALARY, ROLE, DATE_OF_SIGNING, ADDITIONAL_FEES, CONTRACT_ID) VALUES ('Loan', '50000', 'Substitute', TO_DATE('2019-12-23 17:36:19', 'YYYY-MM-DD HH24:MI:SS'), '15000', '202')

INSERT INTO "NAAMANIHADI"."CONTRACT" (TYPE, SALARY, ROLE, DATE_OF_SIGNING, ADDITIONAL_FEES, CONTRACT_ID) VALUES ('Loan', '25000', 'Reserve', TO_DATE('2017-12-07 17:36:23', 'YYYY-MM-DD HH24:MI:SS'), '10000', '203')

INSERT INTO "NAAMANIHADI"."CONTRACT" (TYPE, SALARY, ROLE, DATE_OF_SIGNING, ADDITIONAL_FEES, CONTRACT_ID) VALUES ('Transfer', '150000', 'Important', TO_DATE('2018-12-15 17:36:30', 'YYYY-MM-DD HH24:MI:SS'), '55000', '204')

INSERT INTO "NAAMANIHADI"."CONTRACT" (TYPE, SALARY, ROLE, DATE_OF_SIGNING, ADDITIONAL_FEES, CONTRACT_ID) VALUES ('Renew', '200000', 'Important', TO_DATE('2012-12-06 17:36:34', 'YYYY-MM-DD HH24:MI:SS'), '0', '205')

INSERT INTO "NAAMANIHADI"."CONTRACT" (TYPE, SALARY, ROLE, DATE_OF_SIGNING, ADDITIONAL_FEES, CONTRACT_ID) VALUES ('Renew', '210000', 'Important', TO_DATE('2014-12-05 17:36:39', 'YYYY-MM-DD HH24:MI:SS'), '0', '206')

INSERT INTO "NAAMANIHADI"."CONTRACT" (TYPE, SALARY, ROLE, DATE_OF_SIGNING, ADDITIONAL_FEES, CONTRACT_ID) VALUES ('Loan', '30000', 'Reserve', TO_DATE('2018-05-11 17:36:45', 'YYYY-MM-DD HH24:MI:SS'), '10000', '207')

INSERT INTO "NAAMANIHADI"."CONTRACT" (TYPE, SALARY, ROLE, DATE_OF_SIGNING, ADDITIONAL_FEES, CONTRACT_ID) VALUES ('Transfer', '120000', 'Important', TO_DATE('2019-12-31 17:36:51', 'YYYY-MM-DD HH24:MI:SS'), '60000', '208')

INSERT INTO "NAAMANIHADI"."CONTRACT" (TYPE, SALARY, ROLE, DATE_OF_SIGNING, ADDITIONAL_FEES, CONTRACT_ID) VALUES ('Loan', '40000', 'Substitute', TO_DATE('2019-12-22 17:36:55', 'YYYY-MM-DD HH24:MI:SS'), '5000', '209')

INSERT INTO "NAAMANIHADI"."CONTRACT" (TYPE, SALARY, ROLE, DATE_OF_SIGNING, ADDITIONAL_FEES, CONTRACT_ID) VALUES ('Renew', '200000', 'Important', TO_DATE('2017-08-04 17:37:00', 'YYYY-MM-DD HH24:MI:SS'), '0', '300')

11. Dumping data to DEPARTMENT:

INSERT INTO "NAAMANIHADI"."DEPARTMENT" (D_NUMBER, EXTENSION, NAME, LOCATION) VALUES ('123', '1234', 'Medical', 'Chelsea')

INSERT INTO "NAAMANIHADI"."DEPARTMENT" (D_NUMBER, EXTENSION, NAME, LOCATION) VALUES ('456', '4567', 'Finance', 'Fulham')

INSERT INTO "NAAMANIHADI"."DEPARTMENT" (D_NUMBER, EXTENSION, NAME, LOCATION) VALUES ('789', '7890', 'Management', 'Manchester')

INSERT INTO "NAAMANIHADI"."DEPARTMENT" (D_NUMBER, EXTENSION, NAME, LOCATION) VALUES ('999', '1567', 'Fitness', 'Chelsea')

INSERT INTO "NAAMANIHADI"."DEPARTMENT" (D_NUMBER, EXTENSION, NAME, LOCATION) VALUES ('111', '2567', 'Marketing', 'Manchester')

INSERT INTO "NAAMANIHADI"."DEPARTMENT" (D_NUMBER, EXTENSION, NAME, LOCATION) VALUES ('222', '7654', 'Scouting', 'Manchester')

INSERT INTO "NAAMANIHADI"."DEPARTMENT" (D_NUMBER, EXTENSION, NAME, LOCATION) VALUES ('333', '9876', 'Sponsor', 'Fulham')

INSERT INTO "NAAMANIHADI"."DEPARTMENT" (D_NUMBER, EXTENSION, NAME, LOCATION) VALUES ('444', '4321', 'Recruitment', 'Chelsea')

INSERT INTO "NAAMANIHADI"."DEPARTMENT" (D_NUMBER, EXTENSION, NAME, LOCATION) VALUES ('555', '6543', 'External Relations', 'Fulham')

INSERT INTO "NAAMANIHADI"."DEPARTMENT" (D_NUMBER, EXTENSION, NAME, LOCATION) VALUES ('666', '9999', 'Food', 'Chelsea')

12. Dumping data to SELLS:

INSERT INTO "NAAMANIHADI"."SELLS" (NAME, TICKET_ID, TICKET_TYPE) VALUES ('Stamford Bridge', '100', 'VIP')

INSERT INTO "NAAMANIHADI"."SELLS" (NAME, TICKET_ID, TICKET_TYPE) VALUES ('Old Traford', '200', 'Regular')

INSERT INTO "NAAMANIHADI"."SELLS" (NAME, TICKET_ID, TICKET_TYPE) VALUES ('Stamford Bridge', '99', 'VIP')

INSERT INTO "NAAMANIHADI"."SELLS" (NAME, TICKET_ID, TICKET_TYPE) VALUES ('Wolves', '33', 'VIP')

INSERT INTO "NAAMANIHADI"."SELLS" (NAME, TICKET_ID, TICKET_TYPE) VALUES ('King Power', '211', 'Regular')

INSERT INTO "NAAMANIHADI"."SELLS" (NAME, TICKET_ID, TICKET_TYPE) VALUES ('King Power', '11', 'VIP')

INSERT INTO "NAAMANIHADI"."SELLS" (NAME, TICKET_ID, TICKET_TYPE) VALUES ('Tottenham', '554', 'Regular')

INSERT INTO "NAAMANIHADI"."SELLS" (NAME, TICKET_ID, TICKET_TYPE) VALUES ('Emirates', '87', 'VIP')

INSERT INTO "NAAMANIHADI"."SELLS" (NAME, TICKET_ID, TICKET_TYPE) VALUES ('Anfield', '197', 'VIP')

INSERT INTO "NAAMANIHADI"."SELLS" (NAME, TICKET_ID, TICKET_TYPE) VALUES ('Anfield', '44', 'Regular')

13. Dumping data to Advertises:

INSERT INTO "NAAMANIHADI"."ADVERTISES" (ST_NAME, SPONSOR_NAME) VALUES ('Stamford Bridge', 'Yokahoma')

INSERT INTO "NAAMANIHADI"."ADVERTISES" (ST_NAME, SPONSOR_NAME) VALUES ('Stamford Bridge', 'Nike')

INSERT INTO "NAAMANIHADI"."ADVERTISES" (ST_NAME, SPONSOR_NAME) VALUES ('Old Traford', 'Chevrolet')

INSERT INTO "NAAMANIHADI"."ADVERTISES" (ST_NAME, SPONSOR_NAME) VALUES ('Anfield', 'AXA')

INSERT INTO "NAAMANIHADI"."ADVERTISES" (ST_NAME, SPONSOR_NAME) VALUES ('Tottenham', 'AIA')

INSERT INTO "NAAMANIHADI"."ADVERTISES" (ST_NAME, SPONSOR_NAME) VALUES ('Wolves', 'Addidas')

INSERT INTO "NAAMANIHADI"."ADVERTISES" (ST_NAME, SPONSOR_NAME) VALUES ('King Power', 'ManBetX')

INSERT INTO "NAAMANIHADI"."ADVERTISES" (ST_NAME, SPONSOR_NAME) VALUES ('Anfield', 'Nike')

INSERT INTO "NAAMANIHADI"."ADVERTISES" (ST_NAME, SPONSOR_NAME) VALUES ('Etihad', 'Etihad Airways')

INSERT INTO "NAAMANIHADI"."ADVERTISES" (ST_NAME, SPONSOR_NAME) VALUES ('Emirates', 'Addidas')

14. Dumping data to PLAYER_PHONE_NUMBER:

INSERT INTO "NAAMANIHADI"."PLAYER_PHONE_NUMBER" (KIT_N, PHONE_NUM) VALUES ('10', '+44 111111')

INSERT INTO "NAAMANIHADI"."PLAYER_PHONE_NUMBER" (KIT_N, PHONE_NUM) VALUES ('2', '+44 222222')

INSERT INTO "NAAMANIHADI"."PLAYER_PHONE_NUMBER" (KIT_N, PHONE_NUM) VALUES ('4', '+44 333333')

INSERT INTO "NAAMANIHADI"."PLAYER_PHONE_NUMBER" (KIT_N, PHONE_NUM) VALUES ('6', '+44 444444')

INSERT INTO "NAAMANIHADI"."PLAYER_PHONE_NUMBER" (KIT_N, PHONE_NUM) VALUES ('8', '+44 555555')

INSERT INTO "NAAMANIHADI"."PLAYER_PHONE_NUMBER" (KIT_N, PHONE_NUM) VALUES ('9', '+44 666666')

INSERT INTO "NAAMANIHADI"."PLAYER_PHONE_NUMBER" (KIT_N, PHONE_NUM) VALUES ('7', '+44 777777')

INSERT INTO "NAAMANIHADI"."PLAYER_PHONE_NUMBER" (KIT_N, PHONE_NUM) VALUES ('5', '+44 888888')

INSERT INTO "NAAMANIHADI"."PLAYER_PHONE_NUMBER" (KIT_N, PHONE_NUM) VALUES ('3', '+44 999999')

INSERT INTO "NAAMANIHADI"."PLAYER_PHONE_NUMBER" (KIT_N, PHONE_NUM) VALUES ('1', '+44 000000')

15. Dumping data into STAFF_PHONE_NUMBER:

INSERT INTO "NAAMANIHADI"."STAFF_PHONE_NUMBER" (STAFFID, PHONE_NUMBER) VALUES ('2001', '+44 111222')

INSERT INTO "NAAMANIHADI"."STAFF_PHONE_NUMBER" (STAFFID, PHONE_NUMBER) VALUES ('2003', '+44 222333')

INSERT INTO "NAAMANIHADI"."STAFF_PHONE_NUMBER" (STAFFID, PHONE_NUMBER) VALUES ('2005', '+44 333444')

INSERT INTO "NAAMANIHADI"."STAFF_PHONE_NUMBER" (STAFFID, PHONE_NUMBER) VALUES ('2007', '+44 444555')

INSERT INTO "NAAMANIHADI"."STAFF_PHONE_NUMBER" (STAFFID, PHONE_NUMBER) VALUES ('2009', '+44 555666')

INSERT INTO "NAAMANIHADI"."STAFF_PHONE_NUMBER" (STAFFID, PHONE_NUMBER) VALUES ('2008', '+44 666777')

INSERT INTO "NAAMANIHADI"."STAFF_PHONE_NUMBER" (STAFFID, PHONE_NUMBER) VALUES ('2006', '+44 777888')

INSERT INTO "NAAMANIHADI"."STAFF_PHONE_NUMBER" (STAFFID, PHONE_NUMBER) VALUES ('2000', '+44 888999')

INSERT INTO "NAAMANIHADI"."STAFF_PHONE_NUMBER" (STAFFID, PHONE_NUMBER) VALUES ('2004', '+44 999000')

INSERT INTO "NAAMANIHADI"."STAFF_PHONE_NUMBER" (STAFFID, PHONE_NUMBER) VALUES ('2002', '+44 000111')

16. Dumping data to STADIUM:

INSERT INTO "NAAMANIHADI"."STADIUM1" (NAME, COLUMN2, COLUMN3, COLUMN4, COLUMN5) VALUES ('Stamford Bridge ', 'Chelsea', 'chelsea@info.com', TO_DATE('2019-12-09 00:00:00', 'YYYY-MM-DD HH24:MI:SS'), '555555')

INSERT INTO "NAAMANIHADI"."STADIUM1" (NAME, COLUMN2, COLUMN3, COLUMN4, COLUMN5) VALUES ('Tottenham ', 'Spurs', 'spurs@info.com', TO_DATE('2019-12-25 00:00:00', 'YYYY-MM-DD HH24:MI:SS'), '4433333')

INSERT INTO "NAAMANIHADI"."STADIUM1" (NAME, COLUMN2, COLUMN3, COLUMN4, COLUMN5) VALUES ('Old Traford ', 'Manchester', 'manutd@info.com', TO_DATE('2019-12-14 00:00:00', 'YYYY-MM-DD HH24:MI:SS'), '1111111')

INSERT INTO "NAAMANIHADI"."STADIUM1" (NAME, COLUMN2, COLUMN3, COLUMN4, COLUMN5) VALUES ('King Power ', 'Leicester', 'leicester@info.com', TO_DATE('2019-12-26 00:00:00', 'YYYY-MM-DD HH24:MI:SS'), '32233322')

INSERT INTO "NAAMANIHADI"."STADIUM1" (NAME, COLUMN2, COLUMN3, COLUMN4, COLUMN5) VALUES ('Etihad ', 'Manchester', 'mancity@info.com', TO_DATE('2019-12-30 00:00:00', 'YYYY-MM-DD HH24:MI:SS'), '1143434')

INSERT INTO "NAAMANIHADI"."STADIUM1" (NAME, COLUMN2, COLUMN3, COLUMN4, COLUMN5) VALUES ('Emirates ', 'North London', 'arsenal@info.com', TO_DATE('2020-05-14 00:00:00', 'YYYY-MM-DD HH24:MI:SS'), '225454')

INSERT INTO "NAAMANIHADI"."STADIUM1" (NAME, COLUMN2, COLUMN3, COLUMN4, COLUMN5) VALUES ('Wolves ', 'Wolverhampton', 'wolves@info.com', TO_DATE('2020-12-10 00:00:00', 'YYYY-MM-DD HH24:MI:SS'), '3344233')

INSERT INTO "NAAMANIHADI"."STADIUM1" (NAME, COLUMN2, COLUMN3, COLUMN4, COLUMN5) VALUES ('Bramall Lane ', 'Sheffield', 'sheffutd@info.com', TO_DATE('2019-12-28 00:00:00', 'YYYY-MM-DD HH24:MI:SS'), '6663332')

INSERT INTO "NAAMANIHADI"."STADIUM1" (NAME, COLUMN2, COLUMN3, COLUMN4, COLUMN5) VALUES ('Anfield ', 'Liverpool', 'liverpool@info.com', TO_DATE('2019-12-31 00:00:00', 'YYYY-MM-DD HH24:MI:SS'), '6664443')

INSERT INTO "NAAMANIHADI"."STADIUM1" (NAME, COLUMN2, COLUMN3, COLUMN4, COLUMN5) VALUES ('Castle ', 'Newcastle', 'newcastle@info.com', TO_DATE('2020-01-01 00:00:00', 'YYYY-MM-DD HH24:MI:SS'), '3333121')

# VIII. Final Tables:

1. Table “TICKET”:
   Select * from TICKET;

| | TICKET_ID | PRICE | MATCH_DATE | AVAILABILITY |
|---|---|---|---|---|
| 1 | 100 | 100 | 18-DEC-19 | Y |
| 2 | 200 | 50 | 16-DEC-21 | Y |
| 3 | 99 | 100 | 04-JUN-19 | N |
| 4 | 33 | 200 | 11-DEC-20 | Y |
| 5 | 211 | 50 | 22-DEC-23 | Y |
| 6 | 554 | 50 | 01-JAN-20 | Y |
| 7 | 11 | 200 | 29-DEC-19 | N |
| 8 | 87 | 100 | 18-DEC-14 | N |
| 9 | 197 | 50 | 09-JUL-16 | N |
| 10 | 44 | 200 | 06-AUG-19 | N |

2. Table “TEAM”:

Select * from TEAM;

| | NAME | CITY | RANK | STADIUM_NAME |
|---|---|---|---|---|
| 1 | Chelsea A Team | Manchester | 3 | Stamford Bridge |
| 2 | Chelsea B Team | Manchester | 5 | King Power |
| 3 | Chelsea Academy A | Wolverhampton | 6 | Old Traford |
| 4 | Chelsea Academy B | Tottenham | 7 | Etihad |
| 5 | Chelsea Seniors A | Sheffield | 8 | Anfield |
| 6 | Chelsea Seniors B | Islington | 10 | Anfield |
| 7 | Chelsea Juniors A | Newcastle | 9 | Wolves |
| 8 | Chelsea Juniors B | Chelsea | 4 | Emirates |
| 9 | Chelsea Youth A | Leicester | 2 | Tottenham |
| 10 | Chelsea Youth B | Liverpool | 1 | Stamford Bridge |

3. Table “STAFF_PHONE_NUMBER”:

Select * from STAFF_PHONE_NUMBER;

| | STAFFID | PHONE_NUMBER |
|---|---|---|
| 1 | 2000 | +44 888999 |
| 2 | 2001 | +44 111222 |
| 3 | 2002 | +44 000111 |
| 4 | 2003 | +44 222333 |
| 5 | 2004 | +44 999000 |
| 6 | 2005 | +44 333444 |
| 7 | 2006 | +44 777888 |
| 8 | 2007 | +44 444555 |
| 9 | 2008 | +44 666777 |
| 10 | 2009 | +44 555666 |

4. Table “STAFF”:

Select * from STAFF;

| | ID | TITLE | FNAME | M_INITIAL | LNAME | ADDRESS | SALARY | D_NUM |
|---|---|---|---|---|---|---|---|---|
| 1 | 2000 | Manager | Frank | J. | Lampard | 10 Nevis Avenue, Belfast, BT4 3AE | 10m $ | 123 |
| 2 | 2001 | Owner | Hadi | A. | Naamani | 46 Old Church Rd, London, E4 8DB | 100m $ | 111 |
| 3 | 2002 | Cleaner | Ahmad | A. | Shehade | 17 Swan Mead, Luton, LU4 0YP | 12k $ | 222 |
| 4 | 2003 | Assistant Manager | Ralph | A. | Bou Jawde | The Studio, 7c, Mile End Rd, Norwich, NR4 7QX | 5m $ | 333 |
| 5 | 2004 | Physiotherapist | Phil | J. | Jones | Copyground Lane, High Wycombe, HP12 3HE | 2m $ | 444 |
| 6 | 2005 | Coach | Moussa | A. | Harkous | 14 Rhuddlan Way, Kidderminster, DY10 1YH | 5m $ | 555 |
| 7 | 2006 | Nutrionist | Chris | W. | Shalhoub | 13-16, Howlett Way, Thetford, IP24 1HZ | 3m $ | 666 |
| 8 | 2007 | Chef | Ali | A. | Sheib | 21 Armley Grange Drive, Leeds, LS12 3QH | 4m $ | 456 |
| 9 | 2008 | Masseur | Mohamad | M. | Mohamad | 128 Harbour St, Irvine, KA12 8PZ | 1m $ | 789 |
| 10 | 2009 | Goalkeeping Coach | Mounir | M. | Mouloudi | James St, York, YO10 3WW | 3m $ | 999 |

5. Table “STADIUM”:

   Select * from STADIUM;

| | NAME | LOCATION | CONTACT_INFORMATION | MATCH_DAY | NUMBER_OF_SEATS |
|---|---|---|---|---|---|
| 1 | Stamford Bridge | Chelsea | chelsea@info.com | 09-DEC-19 | 555555 |
| 2 | Tottenham | Spurs | spurs@info.com | 25-DEC-19 | 4433333 |
| 3 | Old Traford | Manchester | manutd@info.com | 14-DEC-19 | 1111111 |
| 4 | King Power | Leicester | leicester@info.com | 26-DEC-19 | 32233322 |
| 5 | Etihad | Manchester | mancity@info.com | 30-DEC-19 | 1143434 |
| 6 | Emirates | North London | arsenal@info.com | 14-MAY-20 | 225454 |
| 7 | Wolves | Wolverhampton | wolves@info.com | 10-DEC-20 | 3344233 |
| 8 | Bramall Lane | Sheffield | sheffutd@info.com | 28-DEC-19 | 6663332 |
| 9 | Anfield | Liverpool | liverpool@info.com | 31-DEC-19 | 6664443 |
| 10 | Castle | Newcastle | newcastle@info.com | 01-JAN-20 | 3333121 |

6. Table “SPONSOR”:

   Select * from SPONSOR;

| | NAME | TYPE | LOCATION | DATE_OF_SPONSORSHIP | WEBSITE |
|---|---|---|---|---|---|
| 1 | Addidas | Full sponsorship | London | 27-DEC-19 | addidas.com |
| 2 | Nike | Full sponsorship | Manchester | 21-DEC-19 | nike.com |
| 3 | Chevrolet | Team Sponsorship | Bristol | 12-DEC-14 | chevrolet.com |
| 4 | Yokahoma | Player Sponsorship | Liverpool | 02-DEC-10 | yokahoma.com |
| 5 | Etihad Airways | Stadium Sponsorship | Newcastle | 31-DEC-19 | etihad.com |
| 6 | Emirates Airways | Player Sponsorship | York | 14-DEC-19 | emirate.com |
| 7 | Qatar Airways | Full Sponsorship | Leeds | 11-DEC-15 | qatar.com |
| 8 | AXA | Team Sponsorship | Cambridge | 09-DEC-16 | axa.com |
| 9 | ManBetX | Team Sponsorship | Oxford | 08-DEC-18 | manbetx.com |
| 10 | AIA | Team Sponsorship | Norwich | 16-DEC-17 | aia.com |

7. Table “SELLS”:

   Select * from SELLS;

| | NAME | TICKET_ID | TICKET_TYPE |
|---|---|---|---|
| 1 | Stamford Bridge | 100 | VIP |
| 2 | Old Traford | 200 | Regular |
| 3 | Stamford Bridge | 99 | VIP |
| 4 | Wolves | 33 | VIP |
| 5 | King Power | 211 | Regular |
| 6 | King Power | 11 | VIP |
| 7 | Tottenham | 554 | Regular |
| 8 | Emirates | 87 | VIP |
| 9 | Anfield | 197 | VIP |
| 10 | Anfield | 44 | Regular |

8. Table “SCHEDULE”:
   Select * from SCHEDULE;

| | START_TIME | END_TIME | BREAK_HOURS | SCHEDULE_ID | STAFF_ID |
|---|---|---|---|---|---|
| 1 | 8:00 | 13:00 | 1 | 2000 | 2001 |
| 2 | 9:00 | 14:00 | 2 | 2001 | 2009 |
| 3 | 7:00 | 13:00 | 3 | 2002 | 2007 |
| 4 | 6:00 | 14:00 | 2 | 2003 | 2005 |
| 5 | 11:00 | 17:00 | 3 | 2004 | 2003 |
| 6 | 10:00 | 16:00 | 2 | 2005 | 2008 |
| 7 | 9:00 | 15:00 | 1 | 2006 | 2006 |
| 8 | 12:00 | 14:00 | 0 | 2007 | 2004 |
| 9 | 11:00 | 17:00 | 2 | 2008 | 2002 |
| 10 | 10:00 | 16:00 | 1 | 2009 | 2000 |

9. Table “PLAYER”:
   Select * from PLAYER;

| | KIT_NUMBER | FNAME | MIDDLE_INITIAL | LNAME | NATIONALITY | BIRTH_DATE | POSITION | LOCATION | SPONSOR_NAME | T_NAME |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 9 | Tammy | A. | Abraham | England | 11-DEC-92 | ST | North London | Addidas | Chelsea A Team |
| 2 | 10 | Harry | B. | Kane | England | 13-DEC-97 | ST | West London | Yokahoma | Chelsea Academy A |
| 3 | 6 | Alisson | C. | Becker | Brazil | 01-DEC-00 | GK | Liverpool | AXA | Chelsea B Team |
| 4 | 1 | Kepa | W. | Arizabalaga | Spain | 03-DEC-88 | GK | Chelsea | AIA | Chelsea Academy B |
| 5 | 2 | Antoine | E. | Rudiger | Germany | 27-DEC-02 | CB | Chelsea | ManBetX | Chelsea Youth A |
| 6 | 3 | David | R. | Luiz | Brazil | 23-DEC-95 | CB | Arsenal | Emirates Airways | Chelsea A Team |
| 7 | 4 | Jordan | T. | Henderson | England | 27-DEC-96 | CM | Liverpool | Chevrolet | Chelsea B Team |
| 8 | 5 | Jorginho | A. | Fevella | Italy | 30-DEC-93 | CM | Manchester | Nike | Chelsea Seniors A |
| 9 | 7 | Ngolo | H. | Kante | France | 31-DEC-90 | CDM | Norwich | Nike | Chelsea Seniors B |
| 10 | 8 | Danny | H. | Williams | England | 15-JUN-00 | LW | Bristol | Addidas | Chelsea Juniors A |

10. Table “PLAYER_PHONE_NUMBER”:

Select * from PLAYER_PHONE_NUMBER;

| | KIT_N | PHONE_NUM |
|---|---|---|
| 1 | 1 | +44 000000 |
| 2 | 2 | +44 222222 |
| 3 | 3 | +44 999999 |
| 4 | 4 | +44 333333 |
| 5 | 5 | +44 888888 |
| 6 | 6 | +44 444444 |
| 7 | 7 | +44 777777 |
| 8 | 8 | +44 555555 |
| 9 | 9 | +44 666666 |
| 10 | 10 | +44 111111 |

11. Table “OWNS”:

Select * from OWNS;

| | KIT_NUMBER | LOCKER_ID |
|---|---|---|
| 1 | 1 | 1300 |
| 2 | 2 | 1400 |
| 3 | 3 | 1500 |
| 4 | 4 | 2200 |
| 5 | 5 | 3300 |
| 6 | 6 | 1200 |
| 7 | 7 | 4400 |
| 8 | 8 | 1900 |
| 9 | 9 | 1000 |
| 10 | 10 | 1100 |

12. Table “LOCKER”:

Select * from LOCKER;

| | ID | CODE | STATUS |
|---|---|---|---|
| 1 | 1000 | 123-321 | Occupied |
| 2 | 1100 | 456-654 | Available |
| 3 | 1200 | 789-987 | Occupied |
| 4 | 1300 | 654-321 | Available |
| 5 | 1400 | 456-123 | Available |
| 6 | 1500 | 123-456 | Occupied |
| 7 | 2200 | 456-789 | Available |
| 8 | 3300 | 654-987 | Available |
| 9 | 4400 | 000-111 | Available |
| 10 | 1900 | 122-211 | Occupied |

13. Table “EQUIPMENT”:

Select * from EQUIPMENT;

| | QUANTITY | EQ_ID | TYPE | COST | BRAND | DEP_NUM |
|---|---|---|---|---|---|---|
| 1 | 100 | 123-123 | Shoes | 100$ | Nike | 999 |
| 2 | 50 | 321-321 | Ball | 20$ | Addidas | 999 |
| 3 | 10 | 123-456 | Goalkeeping gloves | 70$ | Puma | 999 |
| 4 | 100 | 321-654 | Shirts | 30$ | Nike | 444 |
| 5 | 100 | 123-789 | Food | 10$ | Kellogs | 666 |
| 6 | 10 | 111-000 | Medicine | 90$ | Panadol | 123 |
| 7 | 200 | 222-111 | Desk | 110$ | Steelcase | 789 |
| 8 | 300 | 333-999 | Chairs | 70$ | Steelcase | 789 |
| 9 | 40 | 444-666 | Suplements | 15$ | MuscleTech | 444 |
| 10 | 20 | 555-555 | Dummies | 95$ | Nestle | 999 |

14. Table “DEPARTMENT”:

Select * from DEPARTMENT;

| | D_NUMBER | EXTENSION | NAME | LOCATION |
|---|---|---|---|---|
| 1 | 123 | 1234 | Medical | Chelsea |
| 2 | 456 | 4567 | Finance | Fulham |
| 3 | 789 | 7890 | Management | Manchester |
| 4 | 999 | 1567 | Fitness | Chelsea |
| 5 | 111 | 2567 | Marketing | Manchester |
| 6 | 222 | 7654 | Scouting | Manchester |
| 7 | 333 | 9876 | Sponsor | Fulham |
| 8 | 444 | 4321 | Recruitment | Chelsea |
| 9 | 555 | 6543 | External Relations | Fulham |
| 10 | 666 | 9999 | Food | Chelsea |

15. Table “CONTRACT”:

Select * from CONTRACT;

| | TYPE | SALARY | ROLE | DATE_OF_SIGNING | ADDITIONAL_FEES | CONTRACT_ID | LENGTH | KIT_NUM |
|---|---|---|---|---|---|---|---|---|
| 1 | Transfer | 100000 | Important | 10-DEC-15 | 50000 | 201 | 3 | 9 |
| 2 | Loan | 50000 | Substitute | 23-DEC-19 | 15000 | 202 | 1 | 10 |
| 3 | Loan | 25000 | Reserve | 07-DEC-17 | 10000 | 203 | 2 | 8 |
| 4 | Transfer | 150000 | Important | 15-DEC-18 | 55000 | 204 | 4 | 7 |
| 5 | Renew | 200000 | Important | 06-DEC-12 | 0 | 205 | 5 | 5 |
| 6 | Renew | 210000 | Important | 05-DEC-14 | 0 | 206 | 3 | 4 |
| 7 | Loan | 30000 | Reserve | 11-MAY-18 | 10000 | 207 | 1 | 3 |
| 8 | Transfer | 120000 | Important | 31-DEC-19 | 60000 | 208 | 2 | 2 |
| 9 | Loan | 40000 | Substitute | 22-DEC-19 | 5000 | 209 | 3 | 1 |
| 10 | Renew | 200000 | Important | 04-AUG-17 | 0 | 300 | 5 | 6 |

16. Table “ADVERTISES”:

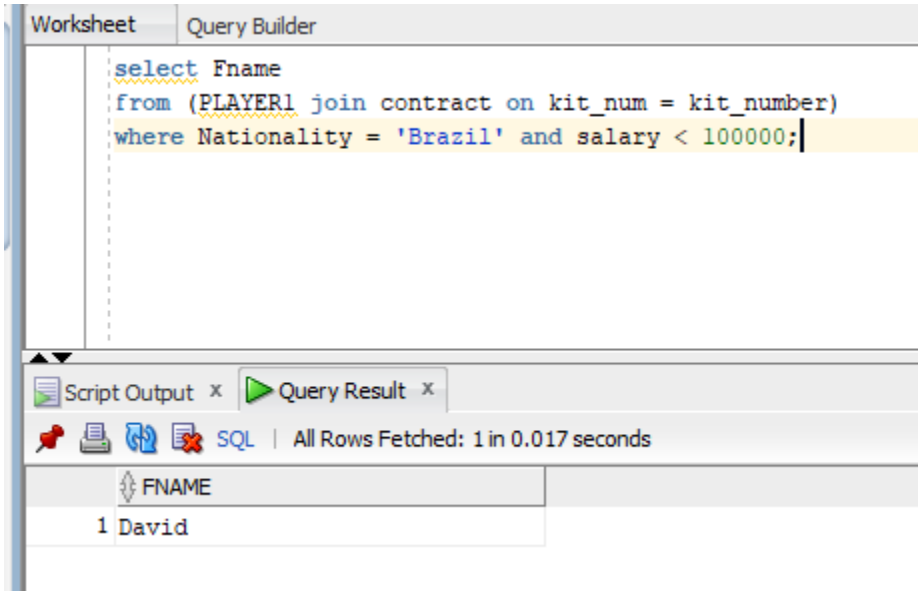
Select * from ADVERTISES;

| | ST_NAME | SPONSOR_NAME |
|---|---|---|
| 1 | Anfield | AXA |
| 2 | Anfield | Nike |
| 3 | Emirates | Addidas |
| 4 | Etihad | Etihad Airways |
| 5 | King Power | ManBetX |
| 6 | Old Traford | Chevrolet |
| 7 | Stamford Bridge | Nike |
| 8 | Stamford Bridge | Yokahoma |
| 9 | Tottenham | AIA |
| 10 | Wolves | Addidas |

# IX. Queries:

Q1. Retrieve the First Name of players who are Brazilians and have a salary less than 100,000.

Output:




Q2. List the staff members who work in departments located in Chelsea.
Output:

```
Worksheet  Query Builder
select fname, m_initial, lname, department.name
from (staff join department on d_num = d_number)
where department.location = 'Chelsea';
```

Script Output | Query Result

SQL | All Rows Fetched: 4 in 0.405 seconds

| | FNAME | M_INITIAL | LNAME | NAME |
|---|---|---|---|---|
| 1 | Frank | J. | Lampard | Medical |
| 2 | Phil | J. | Jones | Recruitment |
| 3 | Chris | W. | Shalhoub | Food |
| 4 | Mounir | M. | Mouloudi | Fitness |

Q3. List the players whose team is in Manchester, England.

Output:

```
Worksheet  Query Builder
select fname, middle_initial, lname, team.name
from (playerl join team on t_name = name)
where team.city = 'Manchester';
```

Script Output | Query Result

SQL | All Rows Fetched: 4 in 0.032 seconds

| | FNAME | MIDDLE_INITIAL | LNAME | NAME |
|---|---|---|---|---|
| 1 | Tammy | A. | Abraham | Chelsea A Team |
| 2 | Alisson | C. | Becker | Chelsea B Team |
| 3 | David | R. | Luiz | Chelsea A Team |
| 4 | Jordan | T. | Henderson | Chelsea B Team |

Q4. List duplicate salaries of staff members.

Output:

```
Worksheet  Query Builder
select salary,count(salary)
from staff
group by salary
having (Count(salary) >1) ;
```

Script Output × | Query Result ×

SQL | All Rows Fetched: 2 in 0.018 second

| | SALARY | COUNT(SALARY) |
|---|---|---|
| 1 | 5m $ | 2 |
| 2 | 3m $ | 2 |

Q5. List the players name and their respective salaries.

Output:

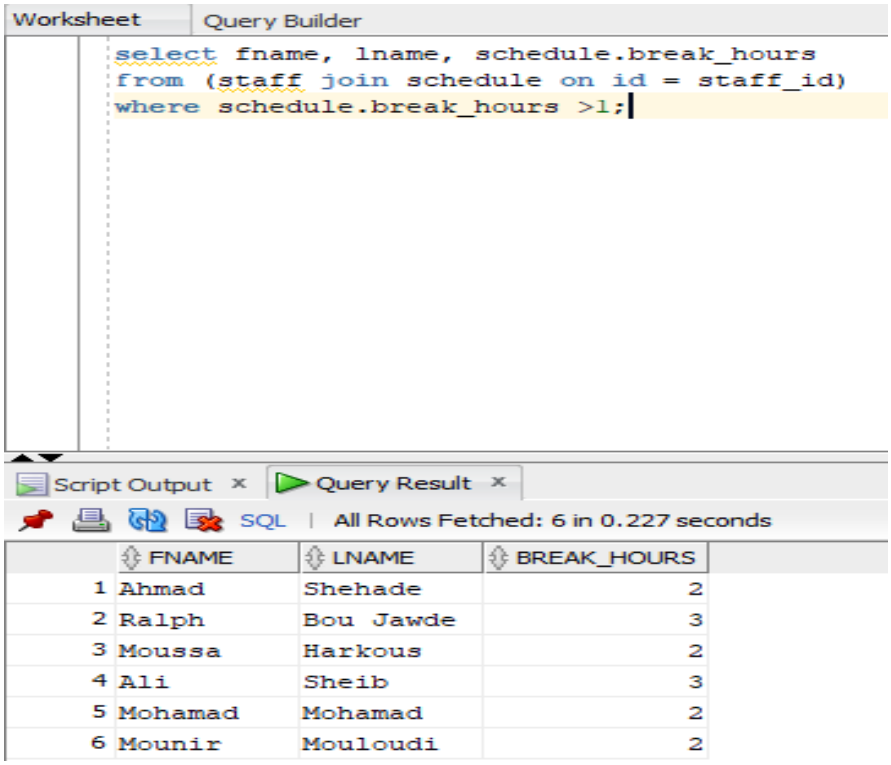
```
Worksheet  Query Builder
SELECT fname, lname, contract.salary
FROM (playerl join contract on kit_number = kit_num)
WHERE salary IN
( SELECT MIN(salary)
FROM contract
GROUP BY contract.salary
);
```

Script Output × | Query Result ×

SQL | All Rows Fetched: 10 in 0.022 seconds

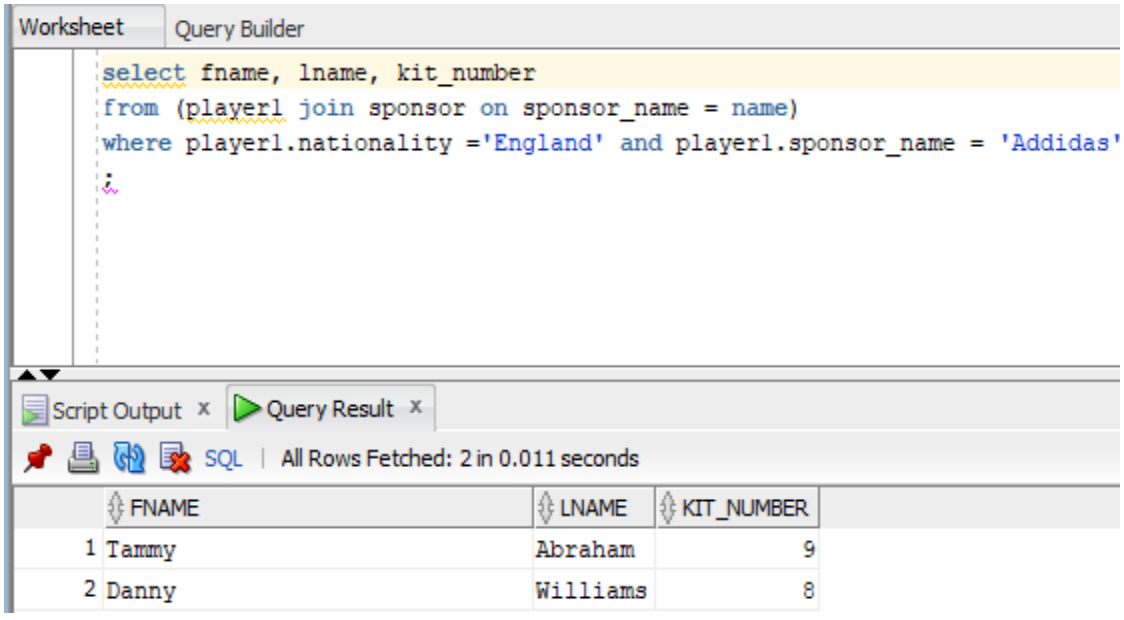
| | FNAME | LNAME | SALARY |
|---|---|---|---|
| 1 | Tammy | Abraham | 100000 |
| 2 | Harry | Kane | 50000 |
| 3 | Alisson | Becker | 200000 |
| 4 | Kepa | Arizabalaga | 40000 |
| 5 | Antoine | Rudiger | 120000 |
| 6 | David | Luiz | 30000 |
| 7 | Jordan | Henderson | 210000 |
| 8 | Jorginho | Ferella | 200000 |
| 9 | Ngolo | Kante | 150000 |
| 10 | Danny | Williams | 25000 |

Q6. List the names of staff members who have more than 1 hour of break.




| | FNAME | LNAME | BREAK_HOURS |
|---|---|---|---|
| 1 | Ahmad | Shehade | 2 |
| 2 | Ralph | Bou Jawde | 3 |
| 3 | Moussa | Harkous | 2 |
| 4 | Ali | Sheib | 3 |
| 5 | Mohamad | Mohamad | 2 |
| 6 | Mounir | Mouloudi | 2 |

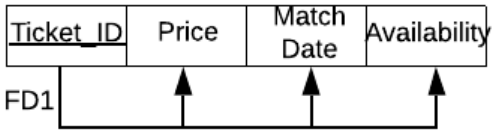
Q7. Retrieve the names of players whose birthdays are in the same year.
Output:




| | FNAME | LNAME | KIT_NUMBER |
|---|---|---|---|
| 1 | Tammy | Abraham | 9 |
| 2 | Danny | Williams | 8 |

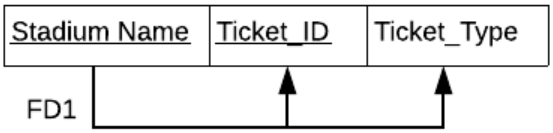
# X. Normalization:

**Ticket:**




This relation schema satisfies the condition of the 1NF. It includes neither multi-valued nor composite attributes and all the values of the attributes of this schema are single atomic.

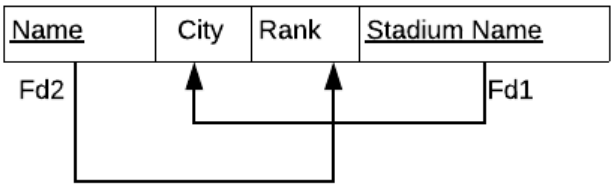
This relation schema is in 2NF because all of its non-prime attributes are fully functional dependent on the single primary key, which is “Ticket_ID”.




This relation schema is in the 3NF because no nontrivial functional dependency X → A that holds in it such that X is a superkey or A is a prime attribute. Therefore, further decomposition for this relation is needed.

This relation schema is in BCNF because there is no nontrivial functional dependency X→A that holds in it such that X is a superkey. In other words, we don’t have any non-prime attributes that can determine other prime attributes. Therefore, no more work is needed to be done and the schema is in BCNF.

**Team:**



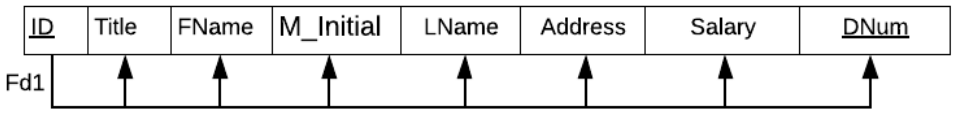
This relation schema satisfies the condition of the 1NF. It includes neither multi-valued nor composite attributes and all the values of the attributes of this schema are single atomic.

This relation schema is not in 2NF because FD1 and FD2 violates the satisfactory condition of 2NF. FD1 is partially dependent on part of the candidate key which is represented by the set {Name, Stadium Name} which means that no fully functional dependency exists. In order to normalize the required relation schema, we have to decompose it.

This relation schema is in the 3NF because no nontrivial functional dependency X → A that holds in it such that X is a superkey or A is a prime attribute. Therefore, further decomposition for this relation is needed.

This relation schema is not in BCNF because FD2 violates the satisfactory condition of BCNF.

**Staff:**



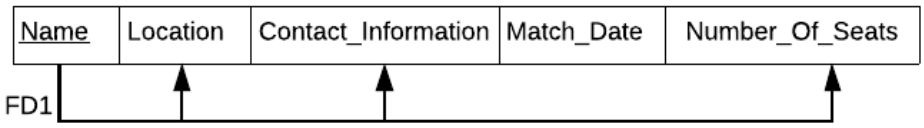

This relation schema does not satisfy the condition of the 1NF. It includes multi-valued and composite attributes and all the values of the attributes of this schema are single atomic.

This relation schema is in 2NF because all of its non-prime attributes are fully functional dependent on the single primary key, which is “ID”.

This relation schema is in the 3NF because no nontrivial functional dependency X → A that holds in it such that X is a superkey or A is a prime attribute. Therefore, further decomposition for this relation is needed.

This relation schema is in BCNF because there is no nontrivial functional dependency X→A that holds in it such that X is a superkey. In other words, we don’t have any non-prime attributes that can determine other prime attributes. Therefore, no more work is needed to be done and the schema is in BCNF.

**Stadium:**



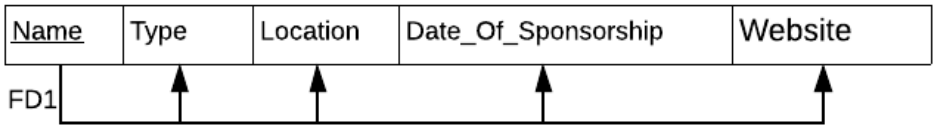

This relation schema satisfies the condition of the 1NF. It includes neither multi-valued nor composite attributes and all the values of the attributes of this schema are single atomic.

This relation schema is in 2NF because all of its non-prime attributes are fully functional dependent on the single primary key, which is “Name”.

This relation schema is in the 3NF because no nontrivial functional dependency X → A that holds in it such that X is a superkey or A is a prime attribute. Therefore, further decomposition for this relation is needed.

This relation schema is in BCNF because there is no nontrivial functional dependency X→A that holds in it such that X is a superkey. In other words, we don’t have any non-prime attributes that can determine other prime attributes. Therefore, no more work is needed to be done and the schema is in BCNF.

**Sponsor:**



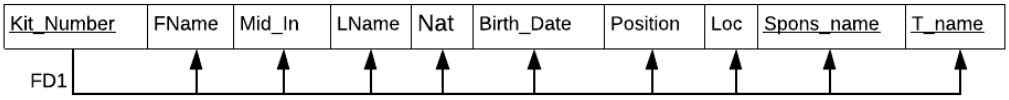

This relation schema satisfies the condition of the 1NF. It includes neither multi-valued nor composite attributes and all the values of the attributes of this schema are single atomic.

This relation schema is in 2NF because all of its non-prime attributes are fully functional dependent on the single primary key, which is “Name”.

This relation schema is in the 3NF because no nontrivial functional dependency X → A that holds in it such that X is a superkey or A is a prime attribute. Therefore, further decomposition for this relation is needed.

This relation schema is in BCNF because there is no nontrivial functional dependency X→A that holds in it such that X is a superkey. In other words, we don't have any non-prime attributes that can determine other prime attributes. Therefore, no more work is needed to be done and the schema is in BCNF.

**Player:**



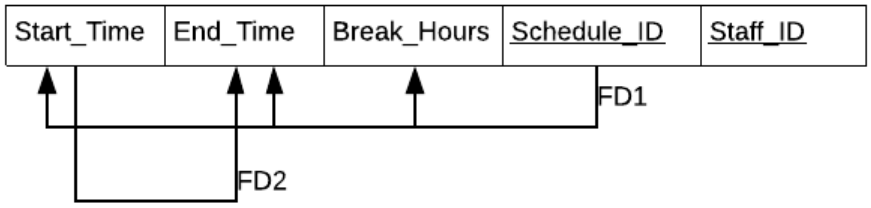

This relation schema does not satisfy the condition of the 1NF. It includes multi-valued and composite attributes and all the values of the attributes of this schema are single atomic.

This relation schema is in 2NF because all of its non-prime attributes are fully functional dependent on the single primary key, which is "Kit_Number".

This relation schema is in the 3NF because no nontrivial functional dependency X → A that holds in it such that X is a superkey or A is a prime attribute. Therefore, further decomposition for this relation is needed.

This relation schema is in BCNF because there is no nontrivial functional dependency X→A that holds in it such that X is a superkey. In other words, we don't have any non-prime attributes that can determine other prime attributes. Therefore, no more work is needed to be done and the schema is in BCNF.

**Schedule:**



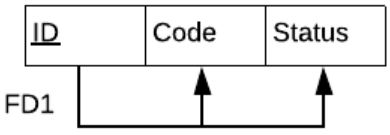

This relation schema satisfies the condition of the 1NF. It includes neither multi-valued nor composite attributes and all the values of the attributes of this schema are single atomic.

This relation schema is in 2NF because all of its non-prime attributes are fully functional dependent on the single primary key, which is “Schedule_ID”.

This relation schema is in the 3NF because no nontrivial functional dependency X → A that holds in it such that X is a superkey or A is a prime attribute. Therefore, further decomposition for this relation is needed.

This relation schema is not in BCNF because FD2 violates the satisfactory condition of BCNF.

**Locker:**



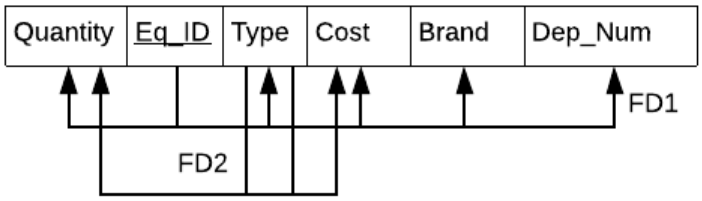

This relation schema satisfies the condition of the 1NF. It includes neither multi-valued nor composite attributes and all the values of the attributes of this schema are single atomic.

This relation schema is in 2NF because all of its non-prime attributes are fully functional dependent on the single primary key, which is “ID”.

This relation schema is in the 3NF because no nontrivial functional dependency X → A that holds in it such that X is a superkey or A is a prime attribute. Therefore, further decomposition for this relation is needed.

This relation schema is in BCNF because there is no nontrivial functional dependency X→A that holds in it such that X is a superkey. In other words, we don’t have any non-prime attributes that can determine other prime attributes. Therefore, no more work is needed to be done and the schema is in BCNF.

**Equipment:**



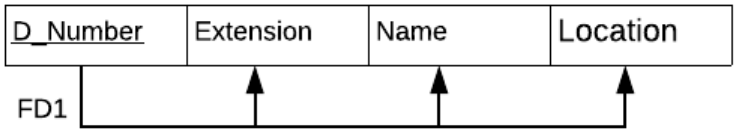

This relation schema satisfies the condition of the 1NF. It includes neither multi-valued nor composite attributes and all the values of the attributes of this schema are single atomic.

This relation schema is in 2NF because all of its non-prime attributes are fully functional dependent on the single primary key, which is “Eq_ID”.

This relation schema is in the 3NF because no nontrivial functional dependency X → A that holds in it such that X is a superkey or A is a prime attribute. Therefore, further decomposition for this relation is needed.

This relation schema is not in BCNF because FD2 violates the satisfactory condition of BCNF.

**Department:**



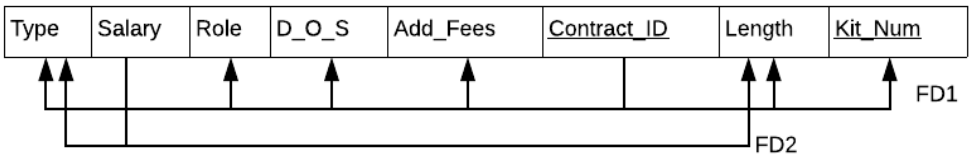

This relation schema satisfies the condition of the 1NF. It includes neither multi-valued nor composite attributes and all the values of the attributes of this schema are single atomic.

This relation schema is in 2NF because all of its non-prime attributes are fully functional dependent on the single primary key, which is “D_Number”.

This relation schema is in the 3NF because no nontrivial functional dependency X → A that holds in it such that X is a superkey or A is a prime attribute. Therefore, further decomposition for this relation is needed.

This relation schema is in BCNF because there is no nontrivial functional dependency X→A that holds in it such that X is a superkey. In other words, we don’t have any non-prime attributes that can determine other prime attributes. Therefore, no more work is needed to be done and the schema is in BCNF.

**Contract:**




This relation schema satisfies the condition of the 1NF. It includes neither multi-valued nor composite attributes and all the values of the attributes of this schema are single atomic.

This relation schema is in 2NF because all of its non-prime attributes are fully functional dependent on the single primary key, which is “Kit_Number”.

This relation schema is in the 3NF because no nontrivial functional dependency X → A that holds in it such that X is a superkey or A is a prime attribute. Therefore, further decomposition for this relation is needed.

This relation schema is not in BCNF because FD2 violates the satisfactory condition of BCNF.