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# OLYMPIC GAMES DATABASE MANAGEMENT SYSTEM

### **Problem Statement:**

The database will contain important information about the event organization and will be accessible to International Olympic Committee. This database will contain the details of the Athletes, participating countries, fixtures, event participation, information about the various games organized (group and individual), venues and services, results and leader board.

This database management system will help the International Olympic Committee to access various types of information and improve the quality of conduction of these games in the future. They can also keep track of the various services and equipment required during the games and assess how many more will be needed.

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- SQL Code

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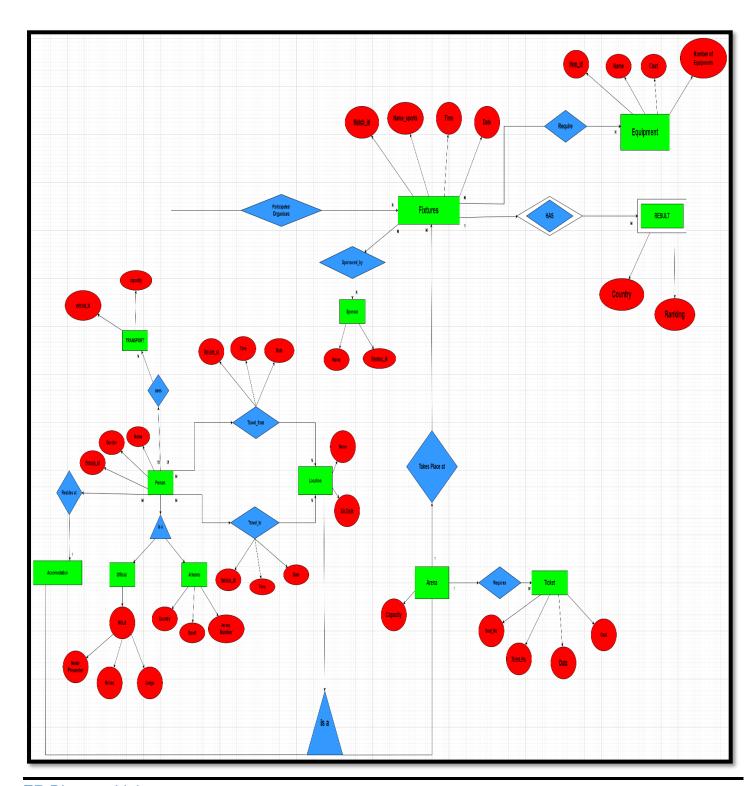
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# **ER MODEL ASSUMPTIONS:**

- 1. All sports taken are solo events
- 2. An athlete participates in one sport only.

# **ER DIAGRAM:**



# **TABLES:**

# 1) EQUIPMENT

Attribute	Datatype	Constraints and Characteristics
Item_Id	INT	NOT NULL, PRIMARY KEY
Name_e	VARCHAR	NOT NULL
Cost	INT	NOT NULL
Number_of_equipment	INT	NOT NULL

# 2)SPONSORS

Attribute	Datatype	Constraints and Characteristics
Name_s	VARCHAR	NOT NULL
Sponsor Id	INT	NOT NULL, PRIMARY KEY

# 3)TRANSPORT

Attribute	Datatype	Constraints and Characteristics
Vehicle_Id	VARCHAR	NOT NULL, PRIMARY KEY
Capacity	INT	NOT NULL

# 4)LOCATION

Attribute	Datatype	Constraints and Characteristics
Name_I	VARCHAR	NOT NULL, PRIMARY KEY
Zip-code	INT	NOT NULL, PRIMARY KEY

# 5)ARENA

Attribute	Datatype	Constraints and Characteristics
Capacity	INT	NOT NULL
Name_l	VARCHAR	NOT NULL, PRIMARY KEY,FOREIGN KEY
Zip-code	INT	NOT NULL, PRIMARY KEY, FOREIGN KEY

# 6)TICKETS

Attribute	Datatype	Constraints and Characteristics
Seat_Number	INT	NOT NULL
Ticket_Number	INT	NOT NULL, PRIMARY KEY
Date	DATE	NOT NULL
Cost	INT	NOT NULL
Name_l	VARCHAR	NOT NULL, FOREIGN KEY
Zip-code	INT	NOT NULL, FOREIGN KEY

# 7)ACCOMODATION

Attribute	Datatype	Constraints and Characteristics
Name_l	VARCHAR	NOT NULL, PRIMARY KEY, FOREIGN KEY
Zip-code	INT	NOT NULL, PRIMARY KEY, FOREIGN KEY

# 8)FIXTURES

Attribute	Datatype	Constraints and Characteristics
Match_Id	VARCHAR	NOT NULL, PRIMARY KEY
Name_Sports	VARCHAR	NOT NULL
Time	VARCHAR	NOT NULL
Date_f	DATE	NOT NULL
Name_l	VARCHAR	NOT NULL, FOREIGN KEY
Zip-code	INT	NOT NULL, FOREIGN KEY

# 9)RESULT

Attribute	Datatype	Constraints and Characteristics
Country	VARCHAR	NOT NULL, PRIMARY KEY
Ranking	INT	NOT NULL
Match_Id	VARCHAR	NOT NULL, PRIMARY KEY, FOREIGN KEY

# 10)SPONSORED\_BY

Attribute	Datatype	Constraints and Characteristics
Sponsor_Id	INT	NOT NULL, FOREIGN KEY
Match_Id	VARCHAR	NOT NULL, FOREIGN KEY

# 11)REQUIRE

Attribute	Datatype	Constraints and Characteristics
Item_Id	INT	NOT NULL, FOREIGN KEY
Match_Id	VARCHAR	NOT NULL, FOREIGN KEY

# 12)PERSON

Attribute	Datatype	<b>Constraints and Characteristics</b>
Name	VARCHAR	NOT NULL
Person_Id	VARCHAR	NOT NULL, PRIMARY KEY
Gender	VARCHAR	NOT NULL
Name_I	VARCHAR	NOT NULL, FOREIGN KEY
Zip-code	INT	NOT NULL, FOREIGN KEY

# 13)PARTICIPATES\_ORGANISES

Attribute	Datatype Constraints and Characteristics	
Match_Id	VARCHAR	NOT NULL, FOREIGN KEY
Person_Id	VARCHAR	NOT NULL, FOREIGN KEY

# 14)TRAVELS\_FROM

Attribute	Datatype	Constraints and Characteristics
Time	VARCHAR	NOT NULL
Date	DATE	NOT NULL
Name_l	VARCHAR	NOT NULL, FOREIGN KEY
Zip-Code	INT	NOT NULL, FOREIGN KEY
Person_Id	VARCHAR	NOT NULL, FOREIGN KEY
Vehicle_Id	VARCHAR	NOT NULL, FOREIGN KEY

# 15)TRAVELS\_TO

Attribute	Datatype	Constraints and Characteristics
Time	VARCHAR	NOT NULL
Date	DATE	NOT NULL
Name_I	VARCHAR	NOT NULL, FOREIGN KEY
Zip-Code	INT	NOT NULL, FOREIGN KEY
Person_Id	VARCHAR	NOT NULL, FOREIGN KEY
Vehicle_Id	VARCHAR	NOT NULL, FOREIGN KEY

# 16)OFFICIAL

Attribute	Datatype	Constraints and Characteristics
Person_Id	VARCHAR	NOT NULL, PRIMARY KEY, FOREIGN KEY
Medal_Presenter	CHAR (1)	NOT NULL
Referee	CHAR (1)	NOT NULL
Judge	CHAR (1)	NOT NULL

# 17)ATHELETE

Attribute	Datatype	Constraints and Characteristics	
Person_Id	VARCHAR	NOT NULL, PRIMARY KEY, FOREIGN KEY	
Sport	VARCHAR	NOT NULL	
Country	VARCHAR	NOT NULL	
Jersey_Number	INT	NOT NULL	

# 18)USES

Attribute	Datatype	<b>Constraints and Characteristics</b>
Vehicle_Id	VARCHAR	NOT NULL, FOREIGN KEY
Person_Id	VARCHAR	NOT NULL, FOREIGN KEY

# **FUNCTIONAL DEPENDENCIES & PRIMARY KEY**

### 1) **EQUIPMENT**:

Item\_Id -> {Item\_Id, Name\_e, Cost, Number\_Of\_Equipment}

Since all the fields depend on Item\_Id, (Item\_Id) + -> R.

Hence, Item Id is Primary Key.

### 2) SPONSORS:

Sponsor Id -> {Sponsor Id, Name s}

Since all the fields depend on Sponsor\_Id, (Sponsor\_Id) + -> R.

Hence, Sponsor\_Id is Primary Key.

### 3) TRANSPORT

Vehicle\_Id -> {Vehicle\_Id, Capacity}

Since all the fields depend on Vehicle\_Id, (Vehicle\_Id) + -> R.

Hence, Vehicle\_Id is Primary Key.

### 4) LOCATION

{Name I, Zip-code} -> {Name I, Zip-code}

Since all the fields depend on {Name\_I, Zip-code}, {Name\_I, Zip-code} +-> R.

Hence, {Name I, Zip-code} is Primary Key.

### 5) ARENA

{Name I, Zip-code} -> {Name I, Zip-code, Capacity}

Since all the fields depend on {Name I, Zip-code}, {Name I, Zip-code} +-> R.

Hence, {Name\_I, Zip-code} is Primary Key.

### 6) TICKETS

{Ticket\_number, Date} {Ticket\_number, Date, Seat\_number, Cost, Name\_I, Zip-code}

Since all the fields depend on {Ticket number, Date}, {Ticket number, Date} + -> R.

Hence, {Ticket number, Date} is Primary Key.

### 7) ACCOMODATION

```
{Name_I, Zip-code} -> {Name_I, Zip-code}
Since all the fields depend on {Name_I, Zip-code}, {Name_I, Zip-code} +-> R.
Hence, {Name_I, Zip-code} is Primary Key.
```

### 8) <u>FIXTURES</u>

```
Match_Id -> {Match_Id, Name_Sports, Time, Date_f, Name_I, Zip-code }
Since all the fields depend on Match_Id, (Match_Id)+ -> R.
Hence, Match_Id is Primary Key.
```

### 9) RESULT

```
{Match_Id, Country} -> {Match_Id, Country, Ranking}
Since all the fields depend on {Match_Id, Country}, ({Match_Id, Country})+ -> R.
Hence, {Match_Id, Country} is Primary Key.
```

### 10)PERSON

```
Person_Id -> {Name, Person_Id, Gender, Name_I, Zip-code}
Since all the fields depend on Person_Id, (Person_Id) + -> R.
Hence, Person_Id is Primary Key.
```

### 11) OFFICIAL

```
Person_Id -> {Person_Id, Medal_Presenter, Referee, Judge}
Since all the fields depend on Person_Id, (Person_Id) + -> R.
Hence, Person_Id is Primary Key.
```

### 12) ATHELETE

```
Person_Id -> {Person_Id, Country, Sport, Jersey_Number}
Since all the fields depend on Person_Id, (Person_Id) + -> R.
Hence, Person_Id is Primary Key
```

# **NORMALISATION:**

### 1) **EQUIPMENT**

Primary key: Item\_Id

All attributes depend on the Item\_Id, hence the table is 2NF.

All attributes depend directly on Item Id, hence the table is in 3NF.

All determinants (Item Id) are candidate keys, hence the table is in BCNF

### 2) SPONSORS

Primary key: Sponsor\_Id

All attributes depend on the Sponsor\_Id, hence the table is 2NF.

All attributes depend directly on Sponsor\_Id, hence the table is in 3NF.

All determinants (Sponsor\_Id) are candidate keys, hence the table is in BCNF.

### 3) TRANSPORT

Primary key: Vehicle\_Id

All attributes depend on the Vehicle Id, hence the table is 2NF.

All attributes depend directly on Vehicle Id, hence the table is in 3NF.

All determinants (Vehicle Id) are candidate keys, hence the table is in BCNF.

### 4) LOCATION

Primary key: {Name\_I, Zip-code}

All attributes depend on the {Name\_I, Zip-code}, hence the table is 2NF.

All attributes depend directly on {Name I, Zip-code}, hence the table is in 3NF.

All determinants {Name I, Zip-code} are candidate keys, hence the table is in BCNF.

### 5) ARENA

Primary key: {Name\_I, Zip-code}

All attributes depend on the {Name\_I, Zip-code}, hence the table is 2NF.

All attributes depend directly on {Name I, Zip-code}, hence the table is in 3NF.

All determinants {Name\_I, Zip-code} are candidate keys, hence the table is in BCNF.

### 6) TICKETS

Primary key: {Ticket number, Date}

All attributes depend on the {Ticket number, Date}, hence the table is 2NF.

All attributes depend directly on {Ticket\_number, Date}, hence the table is in 3NF.

All determinants {Ticket\_number, Date} are candidate keys, hence the table is in BCNF.

### 7) ACCOMODATION

Primary key: {Name | I, Zip-code}

All attributes depend on the {Name\_I, Zip-code}, hence the table is 2NF.

All attributes depend directly on {Name\_I, Zip-code}, hence the table is in 3NF.

All determinants {Name I, Zip-code} are candidate keys, hence the table is in BCNF.

### 8) FIXTURES

Primary key: Match\_Id

All attributes depend on the Match\_Id, hence the table is 2NF.

All attributes depend directly on Match\_Id, hence the table is in 3NF.

All determinants (Match Id) are candidate keys, hence the table is in BCNF.

### 9) RESULT

Primary key: {Match Id, Country}

All attributes depend on the {Match\_Id, Country}, hence the table is 2NF.

All attributes depend directly on {Match\_Id, Country}, hence the table is in 3NF.

All determinants {Match Id, Country} are candidate keys, hence the table is in BCNF.

### 10)PERSON

Primary key: Person Id

All attributes depend on the Person Id, hence the table is 2NF.

All attributes depend directly on Person\_Id, hence the table is in 3NF.

All determinants (Person\_Id) are candidate keys, hence the table is in BCNF.

### 11) OFFICIAL

Primary key: Person\_Id

All attributes depend on the Person Id, hence the table is 2NF.

All attributes depend directly on Person Id, hence the table is in 3NF.

All determinants (Person\_Id) are candidate keys, hence the table is in BCNF.

### 12) ATHELETE

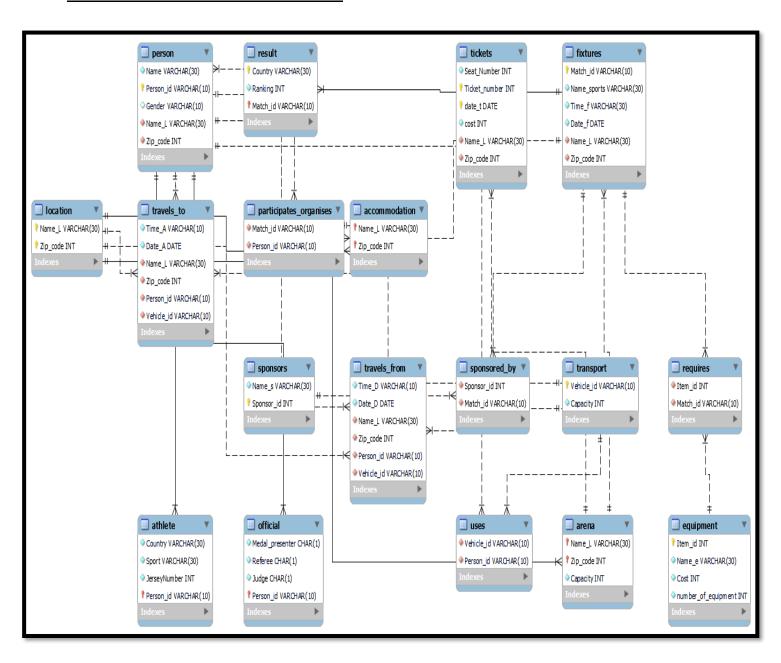
Primary key: Person\_Id

All attributes depend on the Person Id, hence the table is 2NF.

All attributes depend directly on Person\_Id, hence the table is in 3NF.

All determinants (Person Id) are candidate keys, hence the table is in BCNF.

# **RELATIONAL SCHEMA:**



# **SQL CODES:**

# **Table Creation:**

```
create database olympic games;
CREATE TABLE Equipment
 Item_id INT NOT NULL,
 Name_e VARCHAR(30) NOT NULL,
 Cost INT NOT NULL,
 number_of_equipment INT NOT NULL,
 PRIMARY KEY (Item_id)
);
CREATE TABLE Sponsors
 Name_s VARCHAR(30) NOT NULL,
 Sponsor_id INT NOT NULL,
 PRIMARY KEY (Sponsor_id)
);
CREATE TABLE Transport
 Vehicle_id VARCHAR(10) NOT NULL,
 Capacity INT NOT NULL,
 PRIMARY KEY (Vehicle_id)
);
CREATE TABLE Location
 Name_L VARCHAR(30) NOT NULL,
 Zip_code INT NOT NULL,
 PRIMARY KEY (Name_L, Zip_code)
);
```

```
CREATE TABLE Arena
 Name_L VARCHAR(30) NOT NULL,
 Zip_code INT NOT NULL,
 Capacity INT NOT NULL,
 PRIMARY KEY (Name L, Zip code),
 FOREIGN KEY (Name L, Zip code) REFERENCES Location(Name L, Zip code)
);
CREATE TABLE Accommodation
 Name_L VARCHAR(30) NOT NULL,
 Zip code INT NOT NULL,
 PRIMARY KEY (Name L, Zip code),
 FOREIGN KEY (Name L, Zip code) REFERENCES Location(Name L, Zip code)
);
CREATE TABLE Tickets
 Seat Number INT NOT NULL,
 Ticket number INT NOT NULL,
 date_t DATE NOT NULL,
 cost INT NOT NULL,
 Name_L VARCHAR(30) NOT NULL,
 Zip code INT NOT NULL,
 PRIMARY KEY (Ticket_number, date_t),
 FOREIGN KEY (Name_L, Zip_code) REFERENCES Arena(Name_L, Zip_code)
);
CREATE TABLE Fixtures
 Match_id VARCHAR(10) NOT NULL,
 Name_sports VARCHAR(30) NOT NULL,
 Time_f VARCHAR(30) NOT NULL,
```

```
Date f DATE NOT NULL,
 Name_L VARCHAR(30) NOT NULL,
 Zip_code INT NOT NULL,
 PRIMARY KEY (Match_id),
 FOREIGN KEY (Name_L, Zip_code) REFERENCES Arena(Name_L, Zip_code)
);
CREATE TABLE Result
 Country VARCHAR(30) NOT NULL,
 Ranking INT NOT NULL,
 Match id VARCHAR(10) NOT NULL,
 PRIMARY KEY (Country, Match id),
 FOREIGN KEY (Match id) REFERENCES Fixtures(Match id)
);
CREATE TABLE Sponsored by
 Sponsor id INT NOT NULL,
 Match id VARCHAR(10) NOT NULL,
 FOREIGN KEY (Sponsor id) REFERENCES Sponsors(Sponsor id),
 FOREIGN KEY (Match id) REFERENCES Fixtures(Match id)
);
CREATE TABLE Requires
 Item_id INT NOT NULL,
 Match_id VARCHAR(10) NOT NULL,
 FOREIGN KEY (Item_id) REFERENCES Equipment(Item_id),
 FOREIGN KEY (Match_id) REFERENCES Fixtures(Match_id)
);
CREATE TABLE Person
 Name VARCHAR(30) NOT NULL,
```

```
Person id VARCHAR(10) NOT NULL,
 Gender VARCHAR(10),
 Name L VARCHAR(30) NOT NULL,
 Zip code INT NOT NULL,
 PRIMARY KEY (Person_id),
 FOREIGN KEY (Name L, Zip code) REFERENCES Accommodation(Name L, Zip code)
);
CREATE TABLE Official
 Medal presenter CHAR(1) NOT NULL,
 Referee CHAR(1) NOT NULL,
 Judge CHAR(1) NOT NULL,
 Person id VARCHAR(10) NOT NULL,
 PRIMARY KEY (Person_id),
 FOREIGN KEY (Person_id) REFERENCES Person(Person_id)
);
CREATE TABLE Athlete
 Country VARCHAR(30) NOT NULL,
 Sport VARCHAR(30) NOT NULL,
 JerseyNumber INT NOT NULL,
 Person id VARCHAR(10) NOT NULL,
 PRIMARY KEY (Person_id),
 FOREIGN KEY (Person_id) REFERENCES Person(Person_id)
);
CREATE TABLE Participates_organises
(
 Match_id VARCHAR(10) NOT NULL,
 Person_id VARCHAR(10) NOT NULL,
 FOREIGN KEY (Match_id) REFERENCES Fixtures(Match_id),
 FOREIGN KEY (Person id) REFERENCES Person(Person id)
);
```

```
CREATE TABLE Travels from
 Time D VARCHAR(10) NOT NULL,
 Date D DATE NOT NULL,
 Name_L VARCHAR(30) NOT NULL,
 Zip code INT NOT NULL,
 Person_id VARCHAR(10) NOT NULL,
 Vehicle id VARCHAR(10) NOT NULL,
 FOREIGN KEY (Name L, Zip code) REFERENCES Location(Name L, Zip code),
 FOREIGN KEY (Person id) REFERENCES Person(Person id),
 FOREIGN KEY (Vehicle id) REFERENCES Transport(Vehicle id)
);
CREATE TABLE Travels to
 Time A VARCHAR(10) NOT NULL,
 Date A DATE NOT NULL,
 Name L VARCHAR(30) NOT NULL,
 Zip code INT NOT NULL,
 Person id VARCHAR(10) NOT NULL,
 Vehicle id VARCHAR(10) NOT NULL,
 FOREIGN KEY (Name_L, Zip_code) REFERENCES Location(Name_L, Zip_code),
 FOREIGN KEY (Person_id) REFERENCES Person(Person_id),
 FOREIGN KEY (Vehicle id) REFERENCES Transport(Vehicle id)
);
CREATE TABLE Uses
 Vehicle_id VARCHAR(10) NOT NULL,
 Person_id VARCHAR(10) NOT NULL,
 FOREIGN KEY (Vehicle_id) REFERENCES Transport(Vehicle_id),
 FOREIGN KEY (Person id) REFERENCES Person(Person id)
);
```

# **Insert Values to Tables:**

### **LOCATION**

insert into location values ('Olympics Aquatic Stadium', 2501); insert into location values ('Engenehao Stadium', 2503); insert into location values ('Olympics Shooting Centre', 2504); insert into location values ('Sambrodomo', 2504); insert into location values ('Riocentro', 2505); insert into location values ('Miramar Hotel', 2505); insert into location values ('Fasano Hotel', 2506); insert into location values ('Venit Mio Hotel', 2502); insert into location values ('Grand Residency', 2502); insert into location values ('Grand Residency', 2508); select \* from location;

♦ NAME_L	
<sup>1</sup> Engenehao Stadium	2503
<sup>2</sup> Fasano Hotel	2506
3 Grand Residency	2502
4 Grand Residency	2508
<sup>5</sup> Miramar Hotel	2505
6 Olympics Aquatic Stadium	2501
7 Olympics Shooting Centre	2504
8 Riocentro	2505
9 Sambrodomo	2504
10 Venit Mio Hotel	2502

### **ARENA**

insert into arena values ('Olympics Aquatic Stadium', 2501,15000); insert into arena values ('Engenehao Stadium', 2503,60000); insert into arena values ('Olympics Shooting Centre', 2504,10000); insert into arena values ('Sambrodomo', 2504,9000); insert into arena values ('Riocentro', 2505,36000); select \* from arena;

♦ NAME_L		
1 Olympics Aquatic Stadium	2501	15000
<sup>2</sup> Engenehao Stadium	2503	60000
3 Olympics Shooting Centre	2504	10000
4 Sambrodomo	2504	9000
5 Riocentro	2505	36000

### **ACCOMODATION**

insert into accomodation values ('Miramar Hotel', 2505); insert into accomodation values ('Fasano Hotel', 2506); insert into accomodation values ('Venit Mio Hotel', 2502); insert into accomodation values ('Grand Residency', 2502); insert into accomodation values ('Grand Residency', 2508); select \* from accomodation;

	♦ NAME_L	
1	Fasano Hotel	2506
2	Grand Residency	2502
3	Grand Residency	2508
4	Miramar Hotel	2505
5	Venit Mio Hotel	2502

### **TICKETS**

insert into tickets values ('A1',102,'01-05-2016',550,'Engenehao Stadium', 2503); insert into tickets values ('A1',103,'01-05-2016',1000,'Engenehao Stadium', 2503); insert into tickets values ('A1',102,'03-05-2016',2000,'Sambrodomo', 2504); insert into tickets values ('B1',103,'03-05-2016',2000,'Sambrodomo', 2504); insert into tickets values ('A1',105,'10-05-2016',1500,'Riocentro', 2505); select \* from tickets;

	BER TICKET_NUMBER	DATE_T		♦ NAME_L	
<sup>1</sup> A1	102	01-05-16	550	Engenehao Stadiur	n 2503
<sup>2</sup> A1	103	01-05-16	1000	Engenehao Stadiur	n 2503
3 A1	102	03-05-16	2000	Sambrodomo	2504
4 B1	103	03-05-16	2000	Sambrodomo	2504
5 A1	105	10-05-16	1500	Riocentro	2505

### **PERSON**

insert into person values ('Usain Bolt','A1','Venit Mio Hotel', 2502,'M'); insert into person values ('Justin Gatlin','A2','Venit Mio Hotel', 2502,'M'); insert into person values ('Andre De Grasse','A3','Grand Residency', 2508,'M'); insert into person values ('Yohan Blake','A4','Grand Residency', 2508,'M'); insert into person values ('P. V. Sindhu','A5','Fasano Hotel', 2506,'F'); insert into person values ('Nozomi Okuhara','A6','Fasano Hotel', 2506,'F'); insert into person values ('Carolina Marin','A7','Fasano Hotel', 2506,'F'); insert into person values ('Anna Kortozaki','O1','Grand Residency', 2502,'M'); insert into person values ('Monika Karsch','O2','Miramar Hotel', 2505,'F'); insert into person values ('Heidi Diethelm Gerber','O3','Venit Mio Hotel', 2502,'M'); select \* from person;

NAME		∯ NAME_L	
<sup>1</sup> Usain Bolt	A1	Venit Mio Hotel	2502M
2 Justin Gatlin	A2	Venit Mio Hotel	2502M
3 Andre De Grasse	<b>A</b> 3	Grand Residency	2508M
4 Yohan Blake	A4	Grand Residency	2508M
5 P. V. Sindhu	A5	Fasano Hotel	2506F
6 Nozomi Okuhara	A6	Fasano Hotel	2506F
7 Carolina Marin	A7	Fasano Hotel	2506F
8 Anna Kortozaki	01	Grand Residency	2502M
<sup>9</sup> Monika Karsch	02	Miramar Hotel	2505 F
10 Heidi Diethelm Ger	ber 03	Venit Mio Hotel	2502M

### **ATHELETE**

```
insert into athelete values ('Jamaica', 'Men''s 100M',12,'A1'); insert into athelete values ('USA', 'Men''s 100M',34,'A2'); insert into athelete values ('Canada', 'Men''s 100M',20,'A3'); insert into athelete values ('South Africa', 'Men''s 100M',15,'A4'); insert into athelete values ('India', 'Badminton Women''s Single',9,'A5'); insert into athelete values ('Japan', 'Badminton Women''s Single',56,'A6'); insert into athelete values ('Spain', 'Badminton Women''s Single',2,'A7'); select * from athelete;
```

1 Jamaica	Men's 100M	12 A1
<sup>2</sup> USA	Men's 100M	34 A2
3 Canada	Men's 100M	20 A3
4 South Afri	ca Men's 100M	15 A4
5 India	Badminton Women's Single	9 A 5
6 Japan	Badminton Women's Single	56A6
7 Spain	Badminton Women's Single	2 A7

### **OFFICIAL**

insert into official values ('Y','Y','N','O1'); insert into official values ('N','Y','Y','O2'); insert into official values ('Y','Y','Y','O3'); select \* from official;

		REFEREE		♦ PERSON_ID
1	Y	Y	N	01
2	N	Y	Y	02
3	Y	Y	Y	03

### **TRANSPORT**

insert into Transport values ('B01',100); insert into Transport values ('B02',120); insert into Transport values ('B03',50); insert into Transport values ('B04',75); insert into Transport values ('B05',60); select \* from Transport;

	♦ VEHICLE_ID	
1	B01	100
2	B02	120
3	B03	50
4	B04	75
5	B05	60

### **FIXTURES**

insert into fixtures values ('M1', 'Badminton Women''s Final', '09:00 AM', '01-05-2016', 'Engenehao Stadium', 2503);

insert into fixtures values ('M2','Men''s 100M','05:00 PM','03-05-2016','Sambrodomo', 2504); insert into fixtures values ('M3','Men''s 100M Final','11:00 AM','10-05-2016','Riocentro', 2505); select \* from fixtures;

	H_ID ∯ NAME_SPORTS	TIME_F		∯ DATE_F	NAME_L	
1 M1	Badminton Women's Fina	1 09:00	AM	01-05-16	Engenehao Stadium	2503
2 M2	Men's 100M	05:00	PM	03-05-16	Sambrodomo	2504
3 M3	Men's 100M Final	11:00	AM	10-05-16	Riocentro	2505

### **USES**

insert into uses values ('B05','A1'); insert into uses values ('B05','A2'); insert into uses values ('B01','A2'); insert into uses values ('B03','A3'); insert into uses values ('B03','A4'); insert into uses values ('B01','A5'); insert into uses values ('B01','A6'); insert into uses values ('B01','A7'); insert into uses values ('B01','O1'); insert into uses values ('B04','O1'); insert into uses values ('B05','O2'); insert into uses values ('B05','O3'); insert into uses values ('B05','O3'); select \* from uses;

	♦ VEHICLE_ID	PERSON_ID
1	B05	A1
2	B05	A2
3	B01	A2
4	B03	A3
5	B03	A4
6	B01	A5
7	B01	A6
8	B01	A7
9	B01	01
10	B04	01
11	B05	02
12	B02	03
13	B05	03

### PARTICIPATES\_ORGANISES

insert into Participates\_Organises values ('M1','A5'); insert into Participates\_Organises values ('M1','A6'); insert into Participates\_Organises values ('M1','A7'); insert into Participates\_Organises values ('M1','O3'); insert into Participates\_Organises values ('M2','A2'); insert into Participates\_Organises values ('M2','A3'); insert into Participates\_Organises values ('M2','A4'); insert into Participates\_Organises values ('M2','O1'); insert into Participates\_Organises values ('M2','O2'); insert into Participates\_Organises values ('M3','A1'); insert into Participates\_Organises values ('M3','A2'); insert into Participates\_Organises values ('M3','A3');

insert into Participates\_Organises values ('M3','O1'); insert into Participates\_Organises values ('M3','O3'); select \* from Participates\_Organises;

	MATCH_ID	₱ERSON_ID
1	M1	A5
2	M1	A6
3	M1	A7
4	M1	03
5	M2	A2
6	M2	A3
7	M2	A4
8	M2	01
9	M2	02
10	мз	A1
11	мз	A2
12	мз	A3
13	мз	01
14	мз	03

### **RESULT**

insert into result values ('Spain',1,'M1'); insert into result values ('India',2,'M1'); insert into result values ('Japan',3,'M1'); insert into result values ('Canada',1,'M2'); insert into result values ('USA',2,'M2'); insert into result values ('South Africa',3,'M2'); insert into result values ('Jamaica',1,'M3'); insert into result values ('USA',2,'M3'); insert into result values ('Canada',3,'M3'); select \* from result;

		RANKING	\$ MATCH_ID
1	Spain	1	M1
2	India	2	M1
3	Japan	3	M1
4	Canada	1	M2
5	USA	2	M2
6	South Africa	3	M2
7	Jamaica	1	мЗ
8	USA	2	мз
9	Canada	3	мз

### **SPONSORS**

insert into sponsors values ('Coca Cola',501); insert into sponsors values ('Lenovo',502); insert into sponsors values ('Ferrari Ltd.',503); insert into sponsors values ('Subway',504);

### select \* from sponsors;

NAME_S	\$ SPONSOR_ID
1 Coca Cola	501
<sup>2</sup> Lenovo	502
3 Ferrari Ltd.	503
4 Subway	504

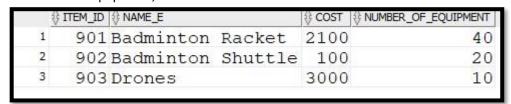
### SPONSORED BY

insert into sponsored\_by values (501,'M1'); insert into sponsored\_by values (502,'M1'); insert into sponsored\_by values (501,'M2'); insert into sponsored\_by values (501,'M3'); insert into sponsored\_by values (503,'M3'); insert into sponsored\_by values (504,'M3'); select \* from sponsored\_by;



### **EQUIPMENT**

insert into equipment values (901, 'Badminton Racket', 2100, 40); insert into equipment values (902, 'Badminton Shuttle', 100, 20); insert into equipment values (903, 'Drones', 3000, 10); select \* from equipment;



### **REQUIRE**

insert into require values (901, 'M1'); insert into require values (902, 'M1'); insert into require values (903, 'M1'); insert into require values (903, 'M2'); insert into require values (903, 'M3'); select \* from require;

ITEM_ID	MATCH_ID
901	M1
902	M1
903	M1
903	M2
903	м3
	901 902 903 903 903

### TRAVELS TO

insert into travels\_to values ('08:30 AM','01-05-2016','Engenehao Stadium',2503,'A5','B01'); insert into travels\_to values ('08:30 AM','01-05-2016','Engenehao Stadium',2503,'A6','B01'); insert into travels\_to values ('08:30 AM','01-05-2016','Engenehao Stadium',2503,'A7','B01'); insert into travels\_to values ('08:00 AM','01-05-2016','Engenehao Stadium',2503,'O3','B02'); insert into travels\_to values ('04:30 PM','03-05-2016','Sambrodomo', 2504,'A2','B01'); insert into travels\_to values ('04:30 PM','03-05-2016','Sambrodomo', 2504,'A4','B03'); insert into travels\_to values ('04:30 PM','03-05-2016','Sambrodomo', 2504,'A4','B03'); insert into travels\_to values ('04:00 PM','03-05-2016','Sambrodomo', 2504,'O1','B04'); insert into travels\_to values ('10:30 AM','10-05-2016','Riocentro', 2505,'A1','B05'); insert into travels\_to values ('10:30 AM','10-05-2016','Riocentro', 2505,'A2','B05'); insert into travels\_to values ('10:00 AM','10-05-2016','Riocentro', 2505,'A3','B03'); insert into travels\_to values ('10:00 AM','10-05-2016','Riocentro', 2505,'O1','B01'); insert into travels\_to values ('10:00 AM','10-05-2016','Riocentro', 2505,'O3','B05'); select \* from travels\_to;

	∯ TIME_A		DATE_A	NAME_L			♦ PERSON_ID	
1	08:30	AM	01-05-16	Engenehao	Stadium	2503	A5	B01
2	08:30	AM	01-05-16	Engenehao	Stadium	2503	A6	B01
3	08:30	AM	01-05-16	Engenehao	Stadium	2503	A7	B01
4	08:00	AM	01-05-16	Engenehao	Stadium	2503	03	B02
5	04:30	PM	03-05-16	Sambrodomo	)	2504	A2	B01
6	04:30	PM	03-05-16	Sambrodomo		2504	<b>A</b> 3	B03
7	04:30	PM	03-05-16	Sambrodomo	)	2504	A4	B03
8	04:00	PM	03-05-16	Sambrodomo		2504	01	B04
9	04:00	PM	03-05-16	Sambrodomo	)	2504	02	B05
10	10:30	AM	10-05-16	Riocentro		2505	A1	B05
11	10:30	AM	10-05-16	Riocentro		2505	A2	B05
12	10:00	AM	10-05-16	Riocentro		2505	<b>A</b> 3	B03
13	10:00	AM	10-05-16	Riocentro		2505	01	B01
14	10:00	AM	10-05-16	Riocentro		2505	03	B05

### TRAVELS\_FROM

insert into travels\_from values ('03:30 PM','01-05-2016','Engenehao Stadium',2503,'A5','B01'); insert into travels\_from values ('03:30 PM','01-05-2016','Engenehao Stadium',2503,'A6','B01'); insert into travels\_from values ('03:30 PM','01-05-2016','Engenehao Stadium',2503,'A7','B01'); insert into travels\_from values ('05:00 PM','01-05-2016','Engenehao Stadium',2503,'O3','B02'); insert into travels\_from values ('10:30 PM','03-05-2016','Sambrodomo', 2504,'A2','B01'); insert into travels\_from values ('11:30 PM','03-05-2016','Sambrodomo', 2504,'A3','B03'); insert into travels\_from values ('11:30 PM','03-05-2016','Sambrodomo', 2504,'A4','B03');

insert into travels\_from values ('10:30 PM','03-05-2016','Sambrodomo', 2504,'O1','B04'); insert into travels\_from values ('10:30 PM','03-05-2016','Sambrodomo', 2504,'O2','B05'); insert into travels\_from values ('05:30 PM','10-05-2016','Riocentro', 2505,'A1','B05'); insert into travels\_from values ('05:30 PM','10-05-2016','Riocentro', 2505,'A2','B05'); insert into travels\_from values ('06:00 PM','10-05-2016','Riocentro', 2505,'A3','B03'); insert into travels\_from values ('07:00 PM','10-05-2016','Riocentro', 2505,'O1','B01'); insert into travels\_from values ('05:30 PM','10-05-2016','Riocentro', 2505,'O3','B05'); select \* from travels from;

∯ TIME_D		NAME_L		⊕ VEHICLE_II
103:30	PM 01-05-16	Engenehao Stadium	2503A5	B01
2 03:30	PM 01-05-16	Engenehao Stadium	2503A6	B01
3 03:30	PM 01-05-16	Engenehao Stadium	2503A7	B01
405:00	PM 01-05-16	Engenehao Stadium	250303	B02
5 10:30	PM 03-05-16	Sambrodomo	2504A2	B01
6 11:30	PM 03-05-16	Sambrodomo	2504 A3	B03
711:30	PM 03-05-16	Sambrodomo	2504 A4	B03
8 10:30	PM 03-05-16	Sambrodomo	250401	B04
910:30	PM 03-05-16	Sambrodomo	250402	B05
10 05:30	PM 10-05-16	Riocentro	2505 A1	B05
11 05:30	PM 10-05-16	Riocentro	2505 A2	B05
12 06:00	PM 10-05-16	Riocentro	2505 A3	B03
13 07:00	PM 10-05-16	Riocentro	250501	B01
14 05:30	PM 10-05-16	Riocentro	250503	B05