

CASE STUDY

ATHELETES DATA FOR OLYMPICS

```
create database OLYMP;

use OLYMP;

select * from athlete_events;

-- 1 query to retrieve all olympics held in summer

select * from athlete_events where Season= "Summer";

-- 2 query to names of all players from China and India

select * from athlete_events where Team="China" or Team="India";

-- 3 query to retrieve all female players less than age 25;

select * from athlete_events where Sex="F" and Age<25;

-- 4 query to update column name

alter table athlete_events rename column Sex to Gender;

select * from athlete_events;

-- 5 query to retrieve all the players of table tennis and athletics of summer season

select * from athlete_events where Sport="Table Tennis" or Sport="Athletics" and Season="Summer";

use OLYMP;

select * from athlete_events;

use OLYMP;

select * from athlete_events;

-- 6 query to retrieve team names in upper

select upper (TEAM) from athlete_events;
```

-- 7 query to retrieve min age of the athletes gender-wise

```
select Gender, min(Age) from athlete_events group by Gender;
```

-- 8 query to get no. of players with height > 174 age-wise

```
select Age, count(*) from athlete_events where Height >174 group by Age;
```

-- 9 query to retrieve no of players with height > 174 having age >21

```
select Age, count(*) from athlete_events where Height >174 group by Age having count(*) >= 21;
```

-- 10 query to retrieve maximum weight from table

```
select max(Weight) from athlete_events;
```

-- 11 query to retrieve minimum weight from table

```
select min(Weight) from athlete_events;
```

-- 12 creating new table from existing table

```
create table Player (select City, Season, Games from athlete_events);
```

```
select * from Player;
```

-- 13 Query to use temporary names for Height as H and weight as W

```
select Height as H, Weight as W from athlete_events;
```

-- 14 query to sort table in ascending order of age

```
select * from athlete_events order by age;
```

-- 15 query to sort table in descending order of age

```
select * from athlete_events order by age desc;
```

-- 16 query to read only 5 records from the table

```
select * from athlete_events limit 0,5;
```

-- 17 query to find max age of the athletes

```
select max(Age) from athlete_events;
```

-- 18 query to find 2nd highest age of the athletes

```

select distinct Age from athlete_events order by Age desc limit 1,1;

-- 19 query to find 2nd highest age using subquery
select max(Age) from athlete_events where Age < (select max(Age) from athlete_events);

-- 20 Query to retrieve average age of the players
select avg(Age) from athlete_events;

-- 21 Query to retrieve average weight of the players
select avg(Weight) from athlete_events;

-- 22 Query to find no. of male and female player from each location
select City, Gender, count(*) from athlete_events group by City, Gender;

use OLYMP;

select * from noc_regions;

select * from athlete_events;

-- 23 Query to find 2nd highest Height of the players
select max(Height) from athlete_events where Height < (select max(Height) from athlete_events);

-- 24 Query to create a new table Players detail from the table athlete_events
create table P_detail ( select PName, Age, City from athlete_events);

select * from P_detail;

-- 25 Query to copy the details of athlete_events to another table
create table copied_table( select * from athlete_events);

select * from copied_table;

-- 26 Query to join the data of both the table
select * from athlete_events full join noc_regions;

-- 27 Query to find the records with common National Olympics Committee
use OLYMP;

select * from athlete_events as a join noc_regions as n on a.NOC= n.NOC;

```

```

-- 28 Query to retrieve the records of athlete_events with common records with noc_regions
select * from athlete_events as a left join noc_regions as n on a.NOC = n.NOC;

-- 29 Query to retrieve all records from noc_events with common records with athlete_events
select * from athlete_events as a right join noc_regions as n on a.NOC = n.NOC;

-- Query to retrieve all the players from same region
select * from athlete_events as a join noc_regions as n on a.Team = n.region;

-- 30 cross join
select * from athlete_events cross join noc_regions;

-- 31 Query to retrieve all the players with same team and region
select * from athlete_events as a, noc_regions as n where a.Team = n.region;

-- 32 Query to retrieve all the players with same team but different region
select * from athlete_events as a, noc_regions as n where a.Team <> n.region;

-- 33 Query to alter name of the column from name to PName
alter table athlete_events rename column Name to PName;

-- 34 Query to retrieve all the records of athlete_events(name, age, gender) and noc_regions(NOC, region,
notes)

select PName, Gender, Age from athlete_events

union

select NOC, region, notes from noc_regions;

-- 35 Query to retrieve data of both the tables in one table (full join)

select * from athlete_events as a left join noc_regions as n on a.NOC = n.NOC

union

select * from athlete_events as a right join noc_regions as n on a.NOC = n.NOC;

-- 36 Query to retrieve all records of both the tables with common data as well (union all)

select * from athlete_events as a left join noc_regions as n on a.NOC = n.NOC

union all

```

```
select * from athlete_events as a right join noc_regions as n on a.NOC = n.NOC;
```

```
-- 37 Query to retrieve the records of all the players with same NOC having age < 22 (union all with condition)
```

```
select * from athlete_events as a left join noc_regions as n on a.NOC = n.NOC
```

```
union all
```

```
select * from athlete_events as a right join noc_regions as n on a.NOC = n.NOC where age > 22;
```

```
use OLYMP;
```

```
select * from athlete_events;
```

```
-- 38 Query to retrieve the records of all the players with same NOC having age < 22 with ascending order of height (union all with condition)
```

```
select * from athlete_events as a left join noc_regions as n on a.NOC = n.NOC
```

```
union all
```

```
select * from athlete_events as a right join noc_regions as n on a.NOC = n.NOC where age > 22 order by Height;
```

```
-- 39 Query to create a new view of the table athlete_view
```

```
create view MyView as select PName, Age, Team, City from athlete_events;
```

```
select * from MyView;
```

```
-- 40 Query to delete MyView created for the table athlete_events
```

```
drop view MyView;
```

