

DATABASE MANAGEMENT SYSTEMS

PROJECT ASSIGNMENT -3

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1.Create the tables (Athletes, Coaches, Entries, Medals, Teams) and add the appropriate primary and foreign keys.

```
CREATE TABLE Athletes(a_name varchar(50) PRIMARY KEY ,noc char(50), discipline char(50), c_id integer);
```

```
CREATE TABLE Coaches(c_id integer PRIMARY KEY,c_name varchar(50),noc char(50), discipline char(50),event char(50));
```

```
CREATE TABLE EntriesGender(discipline varchar(50) PRIMARY KEY, male integer, female integer, total integer);
```

```
CREATE TABLE medals(rank integer,t_name varchar(50) PRIMARY KEY, gold integer, silver integer, bronze integer, total integer, rank_by_total integer);
```

```
CREATE TABLE Teams (t_name varchar(50),discipline char(50), NOC char(50), Event char(50));
```

```
CREATE TABLE guide (a_name varchar(50), c_id integer);
```

2. Find the names of the athletes who's discipline is badminton .

```
SELECT a_name FROM athletes WHERE discipline='Badminton';
```

Query Results	
a_name	
ABDUL RAZZAQ Fathimath Nabaaha	
ABELA Matthew	
ABIAN Pablo	
ADESOKAN Dorcas Ajoke	
AGHAEIHAJIAGHA Soraya	
AHSAN Mohammad	
AN Seyoung	
ANTONSEN Anders	
ASTRUP Kim	
AXELSEN Viktor	
AZURMENDI Clara	
B. Sai Praneeth	
BIRCH Chloe	
BOJE Alexandra	
BURESTEDT Felix	
CALJOUW Mark	
CHAE Yujung	
CHAN Peng Soon	
CHEAH Sonila	
CHEN Hsuan-Yu Wendy	
CHEN Long	YIGI Neslihan
CHEN Qing Chen	ZETCHIRI Linda
CHEN Yu Fei	ZHANG Beiwen
CHEUNG Ngan Yi	ZHENG Si Wei
CHEW Phillip	ZILBERMAN Misha
CHEW Ryan	
CHIA Aaron	
CHOI Solgyu	
CHOU Tien-Chen	
CHOW Mei Kuan	164 row(s)
CHRISTIANSEN Mathias	Total runtime: 5.311 ms
CHRISTIE Jonatan	SQL executed.
COELHO Ygor	
CORDON Kevin	
DELRUE Delphine	
DU Yue	
DUNBAR Adam Robert	

3. Count the total number of countries who has swimming as their discipline.

```
SELECT COUNT(noc) FROM athletes WHERE discipline='Swimming';
```

Query Results	
count	
739	
1 row(s)	
Total runtime: 7.025 ms	
SQL executed.	

4. Find the names of the coaches and their respective countries whose event value is men.

```
SELECT c_name,noc FROM coaches WHERE event='Men';
```

Query Results	
c_name	noc
BATISTA Fernando	Argentina
CADENAS MONTANES Manuel	Argentina
GOMEZ CORA Santiago	Argentina
HERNANDEZ Sergio	Argentina
MENDEZ Marcelo Rodolfo	Argentina
ARNOLD Graham	Australia
BATCH Colin	Australia
FATOVIC Elvis	Australia
GOORJIAN Brian	Australia
POTTER Anthony	Australia
WALSH Tim	Australia
KRIST JANSSON Aron	Bahrain
McLEOD Shane	Belgium
DAL ZOTTO Renan	Brazil
de OLIVEIRA Marcus Ricardo	Brazil
JARDINE Andre	Brazil
GADEMAN Pasha	Canada
HENNING Andre	Canada
UDAS Glenn	Canada

FRIDAY Mike	United States of America
POPOVICH Gregg	United States of America
SPERAW John	United States of America
UDOVICIC Dejan	United States of America
SARTI Ronald	Venezuela

93 row(s)

Total runtime: 3.787 ms

SQL executed.

5. Find the name and NOC of coaches that do not have football as their game.

SELECT c_name,noc FROM coaches WHERE discipline!='Football';

c_name	noc
CRUZ Filipe	Angola
CADENAS MONTANES Manuel	Argentina
FERRARO Hernan	Argentina
GOMEZ CORA Santiago	Argentina
HERNANDEZ Sergio	Argentina
LOPEZ Monica Susana	Argentina
MENDEZ Marcelo Rodolfo	Argentina
RETEGUI Carlos Jose	Argentina
RODRIGUEZ Eduardo Rafael	Argentina
WOELFLIN Roberto Osvaldo	Argentina
BATCH Colin	Australia
BRONDELLO Sandy	Australia
CHAMBERS Cheryl	Australia
DAVY Jeremy	Australia
DYKSTRA Trisha	Australia
FATOVIC Elvis	Australia
GOORJIAN Brian	Australia
HARROW Laing	Australia
JENNINGS Dee	Australia
JONES Nathan	Australia
KIRKPATRICK Andrew	Australia

GUILLEN Ronald	Venezuela
MANZANILLO Andres	Venezuela
PANTOJA Hernan	Venezuela
PEREZ Jose	Venezuela
SARTI Ronald	Venezuela
VASQUEZ Diego	Venezuela
VILLEGAS Orlando	Venezuela

--	--

335 row(s)
Total runtime: 5.597 ms
SQL executed.

6. Find the countries that play archery and those that do not have mixed team as their event.

```
SELECT noc FROM teams WHERE discipline='Archery' AND event!='Mixed Team';
```

Query Results	
noc	
Australia	
Belarus	
Chinese Taipei	
Chinese Taipei	
France	
Germany	
Great Britain	
Great Britain	People's Republic of China
India	Republic of Korea
Indonesia	Republic of Korea
Italy	ROC
Japan	
Japan	Ukraine
Kazakhstan	
Mexico	United States of America
Netherlands	United States of America
People's Republic of China	
People's Republic of China	
Republic of Korea	
Republic of Korea	
ROC	

24 row(s)

Total runtime: 1.744 ms

SQL executed.

7. Find the countries and their ranks whose total medals are between 30 to 100.

```
SELECT t_name,rank FROM medals WHERE total<100 AND total>30;
```

Query Results

t_name	rank
People's Republic of China	2
Japan	3
Great Britain	4
ROC	5
Australia	6
Netherlands	7
France	8
Germany	9
Italy	10

9 row(s)

Total runtime: 1.062 ms

SQL executed.

8. Find the coaches names from spain who plays atleast two different games.

As the coaches names are unique in the dataset and only one coach plays one game. This question is not possible to solve.

8. Find the coaches name and athletes names who plays for spain.

```
SELECT a.a_name,c.c_name FROM athletes a JOIN coaches c ON a.c_id=c.c_id WHERE a.noc='Spain';
```

ABDELSALAM Mohamed	SHAWKY Gharib
ADEL Ibrahim	SHAWKY Gharib
ASHOUR Emam	SHAWKY Gharib
EL WENCH Mahmoud	SHAWKY Gharib

9. Count the number of games who has males and females less than 100.

```
SELECT COUNT(discipline) FROM entriesgender WHERE male<100 and female<100;
```

Query Results

count
25

1 row(s)

Total runtime: 1.666 ms

SQL executed.

10. Find the top countries that received most gold medals and find the countries that received the least gold medals.

(a)

```
select t_name FROM medals WHERE gold = ( SELECT MAX(gold) FROM medals );
```

Query Results

t_name
United States of America

1 row(s)

Total runtime: 1.230 ms

SQL executed.

```
SELECT t_name, MAX (gold) FROM medals GROUP BY t_name HAVING MAX(gold) > 20;
```

Query Results

t_name	max
People's Republic of China	38
Japan	27
United States of America	39
Great Britain	22

4 row(s)

Total runtime: 1.784 ms

SQL executed.

(b) select t_name FROM medals WHERE gold = (SELECT MIN(gold) FROM medals);

Query Results

t_name
Colombia
Azerbaijan
Dominican Republic
Armenia
Kyrgyzstan
Mongolia
Argentina
San Marino
Jordan
Malaysia
Nigeria
Bahrain
Saudi Arabia
Lithuania
North Macedonia
Namibia
Turkmenistan
Kazakhstan
Mexico
Finland
Botswana
Burkina Faso
Cote d'Ivoire
Ghana
Grenada
Kuwait
Republic of Moldova
Syrian Arab Republic

28 row(s)

Total runtime: 1.423 ms

SQL executed.

11. Find the country that produces the highest number of coaches.

```
SELECT noc FROM coaches JOIN (SELECT teams.c_id, COUNT(teams.c_id) AS coachCount FROM teams  
GROUP BY teams.c_id ORDER BY coachCount DESC LIMIT 1) sk ON (sk.c_id = coaches.c_id) ;
```


Query Results

noc
Zambia

1 row(s)

Total runtime: 3.227 ms

SQL executed.

[Edit SQL](#) | [Download](#)

12. Find the countries that produces the least number of coaches.

```
SELECT noc FROM coaches JOIN(SELECT teams.c_id, COUNT(teams.c_id) AS coachCount FROM teams  
GROUP BY teams.c_id ORDER BY coachCount LIMIT 1) sk ON (sk.c_id = coaches.c_id) ;
```

Query Results

noc
Brazil

1 row(s)

Total runtime: 2.375 ms

SQL executed.

[Edit SQL](#) | [Download](#)

13. Find the number of the athletes who has more participation in each game.

```
SELECT MAX(total) FROM entriesgender eg, athletes a WHERE eg.discipline=a.discipline ;
```

Query Results

max

2041

1 row(s)

Total runtime: 3.478 ms

SQL executed.

14. Produce a list of the number of different discipline that are had by countries.

```
SELECT noc,COUNT(discipline) FROM athletes GROUP BY noc ;
```

Query Results	
noc	count
Myanmar	2
Nicaragua	8
Mexico	155
Tonga	5
Nepal	5
Guyana	7
Palestine	4
Poland	195
Lebanon	6
Costa Rica	13
Republic of Moldova	19
Haiti	6
Samoa	8
Equatorial Guinea	3
Antigua and Barbuda	6
Andorra	2
Somalia	2
NULL	0
Bangladesh	6
Indonesia	26
Venezuela	42
Brunei Darussalam	2

Brunei Darussalam	2
Kiribati	3
Federated States of Micronesia	3
Cameroon	11
Luxembourg	11
Czech Republic	117
Sweden	129
Virgin Islands, British	3
Montenegro	35
Uganda	24
Jordan	11
Syrian Arab Republic	6
Dominican Republic	61
Cambodia	3
Ireland	116
Papua New Guinea	7
Singapore	23
San Marino	4
American Samoa	5
Sri Lanka	9
Uzbekistan	62
Portugal	84
Finland	45
Malta	6

Bolivia	5
Ethiopia	42
Niger	7
Panama	9
South Sudan	2
Yemen	3
Lithuania	37
Bulgaria	41
Turkmenistan	8
Croatia	57
Tunisia	57
Aruba	3
Sudan	5
Mali	4
North Macedonia	8
Morocco	48

207 row(s)

Total runtime: 10.718 ms

SQL executed.

15. Find the coaches who got more medals.

```
select c_name FROM coaches WHERE noc in(select t_name from medals where total in (select max(total) from medals));
```

phpPgAdmin: Database Class?

Query Results

c_name
ANDONOVSKI Vlatko
BERG Laura
BROWN Chris
DOBSON Howard
ENGELLAND Chip
ENQUIST Susan
ERIKSEN Ken
FLOWERS Tairia
FRIDAY Mike
FUENTES Andrea
FUERBRINGER Matthew
HARDY William
HARVEY Laura
HUGHES Daniel
JOHNSON Vickie
KIRALY Karch
KRIKORIAN Adam
MAYBURY Elena
POPOVICH Gregg
SPERAW John
STALEY Dawn
TARR Heather
UDOKA Ime
UDOVICIC Dejan
van GUNDY Jeff
WALL Michael
WEINSTEIN Jerry
WRIGHT Jerold

28 row(s)

Total runtime: 3.276 ms

SQL Query Editor

16. List out the athletes with their name starting with A or B.

SELECT a_name FROM athletes WHERE a_name LIKE 'A%' OR a_name LIKE 'B%' ORDER BY a_name ;

Query Results	
a_name	
ABALO Luc	ASHOUR Emam
ABDALLAH Shahd	ATKINSON Nathaniel
ABDALLA Maryam	AUDA Patrik
ABDELSALAM Mohamed	BACCUS Keanu
ACUNA Yenny	BAJIC Stefan
ADEL Ibrahim	BALDWIN Roldani
AEDO Yanara	BALEIWAIRIKI Josefo Masikau
AHMED Mohamed	BALMACEA Rosario
AICARDI Matteo	BALVIN Ondrej
ALARIE Elissa	BANN Blair Cameron
ALBERTARIO Agustina	BARBARA
ALBICY Andrew	BARD Melvin
ALEXANDRI Anna-Maria	BAR Juan Manuel
ALEXANDRI Eirini	BARRIONUEVO Maria Noel
ALI Ali Merza	BATUM Nicolas
ALI Hasan	BAUTISTA Jose
ALI Mohamed	BAYNES Aron
ALINE	BAZAN VELEZ Lautaro
ALLEMAND Julie	BEALE Daniel James
ALLEN Bec	BEATRIZ
ALMADA Thiago	BEKA BEKA Alexis
ALMAQABI Ahmed	BEKHAZI Joelle
ALMEIDA Teresa	BELMONTE Tomas
ALONSO Agostina	BENITES Bruna
ALSAMAHJI Hasan	BENN Brittany
ALTENBURG Lisa	BERNA Phil
ALVAREZ Dario	BERNARDONI Paul
ALVAREZ PIEDRAHITA Estefania	BERTAUD Dimitry
ALVAREZ Santiago	BIJAC Marko
ALVES Dani	BISSETT Brenden David Nelson
ALZIGKOUZI KOMINEA Maria Elli Lela	BITOLO Gabriela
AMIRI Nadiem	BITTER Johannes
AMORIM TALESKA Eduarda	BLANKENAU Jay
ANDRESSA	BLAZQUEZ Joaquin
ANDRESSINHA	BLECHER Eden
ANDREWS Abby	BLEICH Jeremy
ANDREWS Emily	BLICAVS Sara Kirsti
	BOBRITSKY Shelly
	BODEGAS Michael Alexandre
	BOHACIK Jaromir
	BOLACA Napolioni
	BOLMARO Leandro Nicolas
	BONANNO Nicolas
	BONE Edwina
	BONFIM Caio
	BONIFACIO Emilio
	BUIZA Pam
	BUKIC Luka
	BULAICH SIMIAN Daniela
	BURKHILL Hannah
	BUSLJE Andro

123 row(s)

Total runtime: 4.207 ms

SQL executed.

17. List out coach, number of athletes he/she trains and the medals that the team received.

Select c_id,COUNT(a_name) ,medals.silver FROM athletes,medals GROUP BY c_id;

Query Results		
silver	c_id	count
41	87	16
50	29	17
32	71	17
45	34	16
12	205	12

18. Which countries played either basketball or karate.

```
SELECT DISTINCT NOC FROM coaches WHERE discipline IN('Karate','Basketball');
```

Query Results	
noc	
United States of America	
People's Republic of China	
Nigeria	
Italy	
Venezuela	
Czech Republic	
Islamic Republic of Iran	
Dominican Republic	
Australia	
Germany	
Serbia	
Canada	
Spain	
Argentina	
Slovenia	

Slovenia
Puerto Rico
Belgium
France
Japan
Republic of Korea

20 row(s)

Total runtime: 1.437 ms

SQL executed.

19. Display the games and count of the athletes and count of the athletes that played by them.

```
SELECT discipline, COUNT(a_name) FROM athletes GROUP BY discipline;
```

Query Results	
discipline	count
Cycling Track	207
Sport Climbing	37
Archery	122
NULL	0
Wrestling	279
Taekwondo	123
Shooting	340
Judo	373
Football	566
Athletics	2065
Artistic Swimming	98
Table Tennis	164
Marathon Swimming	48
Canoe Sprint	235
Cycling Road	186
3x3 Basketball	62
Sailing	335
Tennis	178
Hockey	406
Rowing	496
Golf	115
Water Polo	269
Equestrian	237
Badminton	164
Weightlifting	187
Modern Pentathlon	69
Rhythmic Gymnastics	95
Canoe Slalom	78
Trampoline Gymnastics	31
Baseball/Softball	219
Cycling BMX Freestyle	19
Handball	342
Swimming	739
Volleyball	274
Karate	77
Basketball	279
Surfing	38
Cycling BMX Racing	43
Boxing	269
Beach Volleyball	90
Skateboarding	77
Fencing	249
Cycling Mountain Bike	74
Artistic Gymnastics	187
Rugby Sevens	283
Diving	133
Triathlon	105

47 row(s)

Total runtime: 7.336 ms

SQL executed.

20. What are the games that have same average of male and female

SELECT discipline from entriesgender WHERE male=female;

discipline	
3x3 Basketball	
Archery	
Artistic Gymnastics	
Basketball	
Beach Volleyball	Shooting
Canoe Slalom	Skateboarding
Cycling BMX Racing	Sport Climbing
Cycling Mountain Bike	Surfing
Golf	Table Tennis
Handball	Taekwondo
Hockey	Trampoline Gymnastics
Marathon Swimming	Triathlon
Modern Pentathlon	Volleyball
Sailing	
Shooting	

23 row(s)
Total runtime: 1.123 ms
SQL executed.

21. Select discipline in which more men are there.

```
SELECT discipline FROM entriesgender WHERE male>female;
```

Query Results
discipline
Athletics
Badminton
Baseball/Softball
Boxing
Canoe Sprint
Cycling Road
Cycling Track
Equestrian
Fencing
Football
Judo
Karate
Rowing
Rugby Sevens
Swimming
Tennis
Water Polo
Weightlifting
Wrestling

19 row(s)

Total runtime: 0.995 ms

SQL executed.