**Queries :**

1. Retrieve country and total participants of a country which has a maximum participation in year 2002.
2. Retrieve name of country which have participated in all the sports that have been held in year 2000.
3. Retrieve name of country which has maximum number of female participants in year 2002.
4. Count Percentage of female and male participation in year 2004.
5. Count Number of matches a given participant played.
6. Retrieve total number of medals each country received in a year 2006.
7. Retrieve name of country which has participated in every year.
8. Retrieve pid of eldest gold medallist of all the years.
9. Retrieve name of country which has got maximum number of gold medals in year 2002.
10. Name of country which won maximum number of gold medals in maximum number of year.
11. Number and category of medal won by india in each year.

**1)Retrieve country and total participants of a country which has a maximum participation in year 2002.**

select \* from(

select count(pid),country from

(

select distinct participantid from

(

select sid from sport where year=2002

)

as r1

join participatesin on sportid = sid

)

as r2

join participant on participantid=pid group by country

)as r3

natural join

(

select max(count) as count from

(

select count(pid),country from

(

select distinct participantid from

(

select sid from sport where year=2002

) as r1

join participatesin on sportid = sid

)

as r2

join participant on participantid=pid group by country

)

as r3

)

as r4

**2) Retrieve name of country which have participated in all the sports that have been held in year 2000.**

SELECT distinct country FROM

(

select distinct sportid,country from

(

participatesin join sport on sportid=sid and year =2000

)

as r1

join participant on participantid=pid

) as r2

WHERE country not in

(

select distinct country from

(

select \* from

(

(select distinct sid as sportid from sport where year=2000) as r1

cross join

(

select distinct country from

(

participatesin join sport on sportid=sid and year = 2000

)

as r2

join participant on participantid=pid

)

as r4

)

as r5

except

(

select distinct sportid,country from

(

participatesin join sport on sportid=sid and year =2000

)

as r2

join participant on participantid=pid

)

)

as r6

);

**3)Retrieve name of country which has maximum number of female participants in year 2002.**

select \* from

(

select country,count(pid) from

(

select distinct participantid from

(

select sid from sport where year=2002

)

as r1

join participatesin on sportid = sid

)

as r2

join participant on participantid=pid where gender = 'F' group by country

)as r3

natural join

(

select max(count) as count from

(

select count(pid),country from

(

select distinct participantid from

(

select sid from sport where year=2002

)

as r1

join participatesin on sportid = sid

)

as r2

join participant on participantid=pid where gender = 'F' group by country

)

as r3

)

as r4;

**4) Count Percentage of female and male participation in year 2004.**

select gender,((count\*100)/total) as percentage from

(

select \* from(

select count(gender) as total from

(

participatesin join sport on sportid=sid and year =2004

)

as r2

join participant on participantid=pid

)

as r3

cross join

(

select distinct gender,count(gender) from

(

participatesin join sport on sportid=sid and year =2004

)

as r2

join participant on participantid=pid group by gender

)

as r4

)

as r5;

**5) Count Number of matches a given participant played.**

select matchid from competesasindividual

where participantid=20020112

union

select matchid from competesasteam join participatesinteam

on competesasteam.teamid=participatesinteam.teamid

where participantid=20020112;

**6) Retrieve total number of medals each country received in year 2006.**

select country,count(medal) as totalMedal from

sport as s join winner as w on(s.sid=w.sportid)

join

participant as p on(w.winnerid=p.pid) where syear='2006' group by country

**7) Retrieve name of country which has participated in every year.**

SELECT distinct country FROM

(

select distinct year,country from

(

participatesin join sport on sportid=sid

)

as r1

join participant on participantid=pid

) as r2

WHERE country not in

(

select distinct country from

(

select \* from

(

(select distinct year from sport) as r1

cross join

(

select distinct country from

(

select distinct year,country from

(

participatesin join sport on sportid=sid

)

as r2

join participant on participantid=pid

)

as r3

)

as r4

)

as r5

except

(

select distinct year,country from

(

participatesin join sport on sportid=sid

)

as r2

join participant on participantid=pid

)

)

as r6

);

**8) Retrieve pid of eldest gold medallist of all the years.**

select pid from(

select participant.pid,syear-extract(year from dob) as age from

(

select syear,winnerid as pid from winner where medal='Gold-M' or medal='Gold-F'

) as r1

join participant on r1.pid=participant.pid

union

select participant.pid,syear-extract(year from dob) as age from

(

select syear,participantid as pid from

(

select tid,syear from

(

select syear,winnerid as tid from winner where medal='Gold-M' or medal='Gold-F'

)

as r1

natural join team

)

as r2

join participatesinteam on tid=teamid

)

as r3

join participant on r3.pid=participant.pid

)

as r6

order by age desc

LIMIT 1

**9) Retrieve name of country which has got maximum number of gold medals in year 2002.**

select country,total\_medals from

(

select \* from

(

select country,sum(count) as total\_medals from

(

select country,count(country) from

(

select winnerid from winner where syear = 2002 and (medal='Gold-M' OR medal='Gold-F')

)

as r1 join team on tid=winnerid group by country

union

select country,count(country) from

(

select winnerid from winner where syear = 2002 and (medal='Gold-M' OR medal='Gold-F')

)

as r2

join participant on pid=winnerid group by country

)

as r3 group by country

)

as r4

join

(

select max(r4.sum) from

(

select country,sum(count) from

(

select country,count(country) from

(

select winnerid from winner where syear = 2000 and (medal='Gold-M' OR medal='Gold-F')

)

as r1

join team on tid=winnerid group by country

union

select country,count(country) from

(

select winnerid from winner where syear = 2000 and (medal='Gold-M' OR medal='Gold-F')

)

as r2

join participant on pid=winnerid group by country

)

as r3

group by country

)

as r4

)

as r5 on r4.total\_medals=r5.max

)

as r6;

**10) Name of country which won maximum number of gold medals in maximum number of year.**

select country,max from(

Select \* from(

select country,count(country) from(

select \* from (**--to find max gold medal winners of each years**

select syear,country,sum(count) as total\_medals from(

select syear,country,count(country) from(

select syear,winnerid from winner where medal='Gold-M' OR medal='Gold-F'

)

as r1 join team on tid=winnerid group by syear,country

union

select syear,country,count(country) from(

select syear,winnerid from winner where medal='Gold-M' OR medal='Gold-F'

)

as r2 join participant on pid=winnerid group by syear,country

)

as r3 group by syear,country

)

as r4

join

(

select syear,max(total\_medals) from(

select syear,country,sum(count) as total\_medals from(

select syear,country,count(country) from(

select syear,winnerid from winner where medal='Gold-M' OR medal='Gold-F'

)

as r1 join team on tid=winnerid group by syear,country

union

select syear,country,count(country) from(

select syear,winnerid from winner where medal='Gold-M' OR medal='Gold-F'

)

as r2

join participant on pid=winnerid group by syear,country

)

as r3

group by syear,country

)

as r4

group by syear

)

as r5 on r4.total\_medals=r5.max and r4.syear=r5.syear

**-------------------------------------------------------**

)

as r6 group by country

)

as r7

join

(

select max(count) from (

select country,count(country) from(

select \* from (

select syear,country,sum(count) as total\_medals from(

select syear,country,count(country) from(

select syear,winnerid from winner where medal='Gold-M' OR medal='Gold-F'

)

as r1 join team on tid=winnerid group by syear,country

union

select syear,country,count(country) from(

select syear,winnerid from winner where medal='Gold-M' OR medal='Gold-F'

)

as r2

join participant on pid=winnerid group by syear,country

)

as r3 group by syear,country

)

as r4

join

(

select syear,max(total\_medals) from(

select syear,country,sum(count) as total\_medals from(

select syear,country,count(country) from(

select syear,winnerid from winner where medal='Gold-M' OR medal='Gold-F'

)

as r1 join team on tid=winnerid group by syear,country

union

select syear,country,count(country) from(

select syear,winnerid from winner where medal='Gold-M' OR medal='Gold-F'

)

as r2

join participant on pid=winnerid group by syear,country

)

as r3

group by syear,country

)

as r4

group by syear

)

as r5 on r4.total\_medals=r5.max and r4.syear=r5.syear

)

as r6

group by country

)

as r10

)

as r8 on r8.max=r7.count

)as r9;

**11) Number and category of medal won by india in each year**

select syear,country,medal,count(pid) as total\_medal from

(

select country,syear,medal,pid from winner as w1 join participant as p1 on (w1.winnerid = p1.pid and country = 'India')

Union

select country,syear,medal,tid as pid from winner as w1 join team as t1 on (w1.winnerid = t1.tid and country = 'India')

) as r1 group by syear,country,medal order by syear