Olympic Gold Medals Problem

<u>Theme:</u> We need to find the players who won only GOLD Medal, ignore the persons who won gold medal with other medals too i.e., silver, bronze

Here is the insert script for the events table:

```
CREATE TABLE events (
ID int,
event varchar(255),
YEAR INt,
GOLD varchar(255),
SILVER varchar(255),
BRONZE varchar(255)
);
INSERT INTO events VALUES (1,'100m',2016, 'Amthhew Mcgarray','donald','barbara');
INSERT INTO events VALUES (2,'200m',2016, 'Nichole','Alvaro Eaton','janet Smith');
INSERT INTO events VALUES (3,'500m',2016, 'Charles','Nichole','Susana');
INSERT INTO events VALUES (4,'100m',2016, 'Ronald','maria','paula');
INSERT INTO events VALUES (5,'200m',2016, 'Alfred','carol','Steven');
INSERT INTO events VALUES (6,'500m',2016, 'Nichole','Alfred','Brandon');
INSERT INTO events VALUES (7,'100m',2016, 'Charles','Dennis','Susana');
INSERT INTO events VALUES (8,'200m',2016, 'Thomas','Dawn','catherine');
INSERT INTO events VALUES (9,'500m',2016, 'Thomas','Dennis','paula');
INSERT INTO events VALUES (10,'100m',2016, 'Charles','Dennis','Susana');
INSERT INTO events VALUES (11,'200m',2016, 'jessica','Donald','Stefeney');
INSERT INTO events VALUES (12,'500m',2016,'Thomas','Steven','Catherine');
```

Solution: #1 – Using Subqueries

```
Select gold as player_name,count(1) as no_of_medals from events where GOLD not in (Select SILVER FROM events union all select BRONZE from events) group by GOLD;
```

Solution: #2 – Using cte, having

```
with cte as(
select GOLD as player_name, 'GOLD' as medal_type from events
union all
select SILVER as player_name, 'SILVER' as medal_type from events
UNION ALL
select BRONZE as player_name, 'BRONZE' as medal_type from events)
SELECT player_name , count(1) as no_of_gold_medals
from cte
group by player_name
having count(distinct medal_type) =1 and max(medal_type)='GOLD';
```