SQL ASSISGNMENT-1

1. How many players are there in the dataset?

   select count(distinct Name) as players

   from fifa;

2. How many nationalities do these players belong to?

   select count(distinct Nationality) as nationalities

   from fifa;

3. What is the total wage given to all players? What's the average and standard deviation?

   select sum(wage) as total_wages ,

   avg(wage) as avg_wages,

   stddev(wage) as stddev_wages

   from fifa;

4. Which nationality has the highest number of players, what are the top 3 nationalities by # of players?

   select Nationality ,count(name) as player_count

   from fifa

   group by Nationality

   order by player_count desc

   limit 3;

5. Which player has the highest wage? Who has the lowest?

   #highest wage
   select name, wage
   from fifa
   order by wage desc
   limit 1;

lowest wage
select name,wage
from fifa
order by wage
limit 1;

6. The player having the – best overall rating? Worst overall rating?

 # best overall rating

select name, overall

from fifa

order by overall desc

limit 1;

 # worst overall rating

select name ,overall

from fifa

order by overall

limit 1;

7. Club having the highest total of overall rating? Highest Average of overall rating?

 # Highest total overall rating
select club, sum (overall) as total_overall_rating
from fifa
group by club
order by total_overall_rating desc
limit 1;

 # Highest average overall rating
select club, avg(overall) as avg_overall_rating
from fifa
group by club
order by avg_overall_rating desc
limit 1;

8. What are the top 5 clubs based on the average ratings of their players and their corresponding averages?

    select club,avg(overall) as avg_rating

    from fifa

    group by club

    order by avg_rating desc

    limit 5;

9. What is the distribution of players whose preferred foot is left vs right?

    ```
    select preferred_foot,
    count(*) as player_count
    from fifa
    group by preferred_foot;
    ```

10. Which jersey number is the luckiest?

    ```
    select jersey_number,
     avg(overall) as avg_overall
    from fifa
    group by jersey_number
    order by avg_overall desc
    limit 1;
    ```

11. What is the frequency distribution of nationalities among players whose club name starts with M?

    select nationality ,

    count(nationality) as freq_dist_nationality

    from fifa

    where club like 'm%'

    group by nationality;

12. How many players have joined their respective clubs in the date range 20 May 2018 to 10 April 2019 (both inclusive)?

```
select count(*) as  players_in_range
from fifa
where STR_TO_DATE(Joined, '%d-%m-%Y')

between '2018-05-20' and '2019-04-10';
```

13. How many players have joined their respective clubs date wise?

```
select STR_TO_DATE(Joined, '%d-%m-%Y') as join_date,

count(*) as total_players

from fifa

group by join_date

order by join_date;
```

14. How many players have joined their respective clubs yearly?

```
select year (STR_TO_DATE(Joined, '%d-%m-%Y')) as join_year,

count(*) as total_players

from fifa

group by join_year

order by  join_year;
```