```sql
create database mudock;

show tables;

select * from fifa;

select * from fifa limit 10;
```

1)#*********How many players are there in the dataset?*********#

```sql
select count(fifa.name) as total_name from fifa;
```

2)#****How many nationalities do these players belong to?****#

```sql
select count(nationality) as total_cnt_nationality,count(distinct nationality) as cnt_nationality from fifa;

select distinct nationality from fifa;
```

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

```sql
select sum(wage)as total_wages,avg(wage) as avg_wages,stddev(wage) as std_wages from fifa;
```

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

```sql
select nationality,count(*) 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?-----#

```sql
 select * from fifa limit 10;

select name,wage

from fifa

where wage=(select max(Wage) from fifa);


select name,wage
```

from fifa

where wage=(select min(wage) from fifa);

6)#-----The player having the – best overall rating? Worst overall rating?-----#

select name,Potential

from fifa

where potential=(select max(Potential) from fifa);

select name,Potential

from fifa

where potential=(select min(Potential) from fifa);

7)#-----Club having the highest total of overall rating? Highest Average of overall rating?-----#

select club,avg(overall)as avg_overall

from fifa

where club is not null

group by club

order by avg_overall;

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

select name,club,avg(potential) as avg_potential

from fifa

where club is not null

group by club,Name

order by avg_potential desc

limit 5;

9)#-----What is the distribution of players whose preferred foot is left vs right?-----#

select * from fifa limit 10;

```
select preferred_foot,count(*) as cnt_pref from fifa

group by  preferred_foot;
```

10)#-----Which jersey number is the luckiest?-----#

```
select jersey_number,avg(overall) avg_overall_potential,count(*) as cnt_palyers

from fifa

where jersey_number is not null

group by Jersey_Number

order by avg_overall_potential desc

limit 1;
```

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

```
select nationality,count(*) as cnt_nat

from fifa

where club like "M%" and nationality is not null

group by nationality

order by cnt_nat desc;
```

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 player_count

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 player_count
FROM
    fifa
WHERE
    Joined IS NOT NULL
GROUP BY
    STR_TO_DATE(Joined, '%d-%m-%Y')
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 player_count
FROM
    fifa
WHERE
    Joined IS NOT NULL
GROUP BY
    join_year
ORDER BY
    join_year;
```