Soccer Player Performance Analysis

CREATE DATABASE SoccerPlayerAnalysis; USE SoccerPlayerAnalysis;

select * from cleaned_Fifa_Olympics_dataset;

-- Top players by overall rating

SELECT TOP 10

Name, Club, Nationality, Overall, Value, Wage FROM cleaned_Fifa_Olympics_dataset ORDER BY Overall DESC;

	Name	Club	Nationality	Overall	Value	Wage
1	Cristiano Ronaldo	Real Madrid CF	Portugal	94	95500000	565000
2	L. Messi	FC Barcelona	Argentina	93	105000000	565000
3	M. Neuer	FC Bayern Munich	Germany	92	61000000	230000
4	L. Suárez	FC Barcelona	Uruguay	92	97000000	510000
5	Neymar	Paris Saint-Germain	Brazil	92	123000000	280000
6	R. Lewandowski	FC Bayern Munich	Poland	91	92000000	355000
7	Sergio Ramos	Real Madrid CF	Spain	90	52000000	310000
8	G. Higuaín	Juventus	Argentina	90	77000000	275000
9	T. Kroos	Real Madrid CF	Germany	90	79000000	340000
10	E. Hazard	Chelsea	Belgium	90	90500000	295000

--Average age of players in each position

SELECT TOP 10

Name, Club, Nationality, Overall, Value, Wage FROM cleaned_Fifa_Olympics_dataset ORDER BY Overall DESC;

	Name	Club	Nationality	Overall	Value	Wage
1	Cristiano Ronaldo	Real Madrid CF	Portugal	94	95500000	565000
2	L. Messi	FC Barcelona	Argentina	93	105000000	565000
3	M. Neuer	FC Bayern Munich	Germany	92	61000000	230000
4	L. Suárez	FC Barcelona	Uruguay	92	97000000	510000
5	Neymar	Paris Saint-Germain	Brazil	92	123000000	280000
6	R. Lewandowski	FC Bayern Munich	Poland	91	92000000	355000
7	Sergio Ramos	Real Madrid CF	Spain	90	52000000	310000
8	G. Higuaín	Juventus	Argentina	90	77000000	275000
9	T. Kroos	Real Madrid CF	Germany	90	79000000	340000
10	E. Hazard	Chelsea	Belgium	90	90500000	295000

--Market value distribution among different nationalities

SELECT Nationality, COUNT(*) AS Player_Count, ROUND(AVG(CAST(Value AS FLOAT)), 2) AS Avg_Value, MIN(Value) AS Min_Value, MAX(Value) AS Max_Value FROM cleaned_Fifa_Olympics_dataset GROUP BY Nationality ORDER BY Avg_Value DESC;

	Nationality	Player_Count	Avg_Value	Min_Value	Max_Value
1	Gabon	12	7903333.33	260000	61000000
2	Syria	6	5654166.67	625000	10500000
3	Croatia	109	5213990.83	30000	57000000
4	Dominican Republic	3	4896666.67	290000	10500000
5	Algeria	57	4884385.96	110000	30500000
6	Portugal	367	4612111.72	0	95500000
7	Spain	1019	4517443.57	50000	70500000
8	Mozambique	3	4466666.67	1000000	8000000
9	Belgium	272	4450091.91	0	90500000
10	Guinea	25	4321200	130000	34000000
11	Bosnia Herzegovina	55	4300272.73	60000	43500000
12	Uruguay	153	4146045.75	0	97000000
13	Kenya	7	4013571.43	90000	23000000
14	Brazil	812	4008897.78	0	123000000
15	Serbia	133	3922669.17	110000	21000000
16	Chad	2	3912500	325000	7500000
17	Armonia	1/	2007057 1/	100000	20000000

-- Performance metrics of players by club

```
SELECT Club,

ROUND(AVG(Overall), 2) AS Avg_Overall,

ROUND(AVG(Potential), 2) AS Avg_Potential,

ROUND(AVG(Value), 2) AS Avg_Value,

ROUND(AVG(Wage), 2) AS Avg_Wage

FROM cleaned_Fifa_Olympics_dataset

GROUP BY Club

ORDER BY Avg_Overall DESC;
```

	Club	Avg_Overall	Avg_Potential	Avg_Value	Avg_Wage
1	FC Barcelona	82	85	29780000	191680
2	Juventus	81	84	23734615	121730
3	Real Madrid CF	81	85	31796153	182730
4	FC Bayern Munich	79	84	28800961	125884
5	Roma	77	80	13695555	59925
6	Napoli	77	81	15762307	62461
7	Manchester United	77	83	18391176	107441
8	Paris Saint-Germain	77	83	22562500	78500
9	Sevilla FC	76	80	11653461	20576
10	Chelsea	76	82	20396515	107181
11	FC Porto	76	80	10570967	13258
12	Sporting CP	76	80	10697656	19500
13	Inter	76	81	13710200	53440
14	Athletic Club de Bilbao	75	79	9898148	22592
15	Beşiktaş JK	75	78	7677884	41230
16	Bayer 04 Leverkusen	75	80	10361111	38851

-- Most common positions among top-performing players

SELECT [Preferred_Positions], COUNT(*) AS Player_Count
FROM cleaned_Fifa_Olympics_dataset
WHERE Overall >= 85
GROUP BY [Preferred_Positions]
ORDER BY Player_Count DESC;

	Preferred_Positions	Player_Count
1	СВ	18
2	GK	13
3	ST	12
4	CDM CM	7
5	CM CDM	4
6	LW	3
7	LB	3
8	CM	2
9	RM CM CAM	2
10	RW	2
11	RW CAM	1
12	RW RM	1
13	RM LM	1
14	RM LW ST LM	1
15	LW LM	1
16	LWRW	1

-- Players with highest acceleration and agility

SELECT TOP 10

Name, Club, Nationality, Acceleration, Agility, Sprint_Speed FROM cleaned_Fifa_Olympics_dataset ORDER BY Acceleration DESC, Agility DESC;

	Name	Club	Nationality	Acceleration	Agility	Sprint_speed
1	Douglas Costa	Juventus	Brazil	96	91	88
2	K. Manneh	Columbus Crew SC	United States	96	85	92
3	Héctor Bellerín	Arsenal	Spain	96	84	94
4	Lucas	Paris Saint-Germain	Brazil	95	94	92
5	Gelson Martins	Sporting CP	Portugal	95	94	94
6	A. Musa	Leicester City	Nigeria	95	88	92
7	J. Biabiany	Sparta Praha	France	95	86	96
8	J. Damm	Tigres U.A.N.L.	Mexico	95	85	95
9	P. Aubameyang	Borussia Dortmund	Gabon	95	77	96
10	M. Bolly	SpVgg Greuther Fürth	Ivory Coast	95	73	95

-- Average wage for players in each club

SELECT Club, ROUND(AVG(Wage), 2) AS Avg_Wage FROM cleaned_Fifa_Olympics_dataset GROUP BY Club ORDER BY Avg_Wage DESC;

		,
	Club	Avg_Wage
1	Zenit St. Petersburg	45433
2	River Plate	14892
3	CS Marítimo	5133
4	Evkur Yeni Malatyaspor	6366
5	Reading	19500
6	Argentinos Juniors	3214
7	Empoli	3206
8	KAS Eupen	4678
9	Aberdeen	5291
10	Bourg en Bresse Péronnas 01	2130
11	Aarhus GF	4296
12	Tigres U.A.N.L.	35750
13	Avaí Futebol Clube	9100
14	VVV-Venlo	4964
15	Kristiansund BK	1148
16	FC Barcelona	191680

--Potential vs overall rating for young talents

SELECT TOP 10

Name, Age, Overall, Potential, (Potential - Overall) AS Growth_Potential FROM cleaned_Fifa_Olympics_dataset
WHERE Age <= 21
ORDER BY Growth_Potential DESC;

	Name	Age	Overall	Potential	Growth_Potential
1	A. Gomes	16	64	90	26
2	C. Gregory	17	54	80	26
3	D. Amos	17	48	74	26
4	J. Latibeaudiere	17	47	73	26
5	M. Cooper	17	52	77	25
6	S. Sessegnon	17	50	75	25
7	R. Nelson	17	59	83	24
8	J. Romero	16	58	82	24
9	L. Plogmann	17	57	81	24
10	L. Pintor	16	54	78	24

--Players with multiple preferred positions

SELECT Name, Preferred_Positions, Overall, Potential, Club
FROM cleaned_Fifa_Olympics_dataset
WHERE LEN(Preferred_Positions) - LEN(REPLACE(Preferred_Positions, '', ")) >= 1
ORDER BY Overall DESC;

	Name	Preferred_Positions	Overall	Potential	Club
1	Cristiano Ronaldo	STLW	94	94	Real Madrid CF
2	T. Kroos	CDM CM	90	90	Real Madrid CF
3	K. De Bruyne	RM CM CAM	89	92	Manchester City
4	A. Sánchez	RM LW ST LM	89	89	Arsenal
5	L. Modrić	CDM CM	89	89	Real Madrid CF
6	P. Dybala	ST CAM	88	93	Juventus
7	A. Griezmann	LW RW ST	88	91	Atlético Madrid
8	Thiago	CDM CAM CM	88	90	FC Bayern Munich
9	M. Özil	RW CAM	88	88	Arsenal
10	A. Robben	RW RM	88	88	FC Bayern Munich
11	N. Kanté	CM CDM	87	90	Chelsea
12	M. Verratti	CDM CM	87	91	Paris Saint-Germain
13	P. Pogba	CDM CM	87	92	Manchester United
14	C. Eriksen	LM RM CAM	87	91	Tottenham Hotspur
15	A. Vidal	CM CDM	87	87	FC Bayern Munich
16	David Silva	LM CM CAM	87	87	Manchester City

--Correlation between physical and skill attributes

SELECT

ROUND(AVG(Strength), 2) AS Avg_Strength, ROUND(AVG(Shot_Power), 2) AS Avg_ShotPower, ROUND(AVG(Agility), 2) AS Avg_Agility, ROUND(AVG(Dribbling), 2) AS Avg_Dribbling FROM cleaned_Fifa_Olympics_dataset;



--Average market value of players by age group

SELECT

```
CASE
    WHEN Age < 20 THEN 'Under 20'
    WHEN Age BETWEEN 20 AND 24 THEN '20-24'
    WHEN Age BETWEEN 25 AND 29 THEN '25-29'
    WHEN Age BETWEEN 30 AND 34 THEN '30-34'
    ELSE '35+'
  END AS Age_Group,
  ROUND(AVG(CAST(Value AS FLOAT)), 2) AS Avg_Value
FROM cleaned_Fifa_Olympics_dataset
GROUP BY
  CASE
    WHEN Age < 20 THEN 'Under 20'
    WHEN Age BETWEEN 20 AND 24 THEN '20-24'
    WHEN Age BETWEEN 25 AND 29 THEN '25-29'
    WHEN Age BETWEEN 30 AND 34 THEN '30-34'
    ELSE '35+'
  END
ORDER BY Age_Group;
```

	Age_Group	Avg_Value
1	20-24	2142745.71
2	25-29	3277318.95
3	30-34	2572932.06
4	35+	719241.45
5	Under 20	618215.71

--Players with best free-kick accuracy

SELECT TOP 10

Name, Club, Nationality, Free_kick_accuracy, Curve, Shot_Power FROM cleaned_Fifa_Olympics_dataset ORDER BY Free_kick_accuracy DESC;

	Name	Club	Nationality	Free_kick_accuracy	Curve	Shot_Power
1	H. Çalhanoğlu	Milan	Turkey	93	92	87
2	A. Pirlo	New York City Football Club	Italy	93	92	75
3	M. Pjanić	Juventus	Bosnia Herzegovina	91	86	78
4	D. Payet	Olympique de Marseille	France	91	90	78
5	L. Messi	FC Barcelona	Argentina	90	89	85
6	Parejo	Valencia CF	Spain	90	87	80
7	S. Giovinco	Toronto FC	Italy	89	86	79
8	G. Sigurðsson	Everton	Iceland	89	87	82
9	M. Depay	Olympique Lyonnais	Netherlands	88	85	88
10	S. Nakamura	Júbilo Iwata	Japan	88	87	79

--Player statistics comparison by club

SELECT Club,

ROUND(AVG(Overall), 2) AS Avg_Overall, ROUND(AVG(Potential), 2) AS Avg_Potential,

ROUND(AVG(Value), 2) AS Avg_Value, ROUND(AVG(Wage), 2) AS Avg_Wage, ROUND(AVG(Acceleration), 2) AS Avg_Acceleration, ROUND(AVG(Agility), 2) AS Avg_Agility

FROM cleaned_Fifa_Olympics_dataset GROUP BY Club

ORDER BY Avg Overall DESC;

	Club	Avg_Overall	Avg_Potential	Avg_Value	Avg_Wage	Avg_Acceleration	Avg_Agility
1	FC Barcelona	82	85	29780000	191680	73.32	72.76
2	Juventus	81	84	23734615	121730	71.81	71.15
3	Real Madrid CF	81	85	31796153	182730	72.15	72.35
4	FC Bayern Munich	79	84	28800961	125884	69.5	69.42
5	Roma	77	80	13695555	59925	71.26	66.44
6	Napoli	77	81	15762307	62461	72.38	70.65
7	Manchester United	77	83	18391176	107441	70.24	68.53
8	Paris Saint-Germain	77	83	22562500	78500	71.21	72.18
9	Sevilla FC	76	80	11653461	20576	65.08	67.19
10	Chelsea	76	82	20396515	107181	71.42	69.55
11	FC Porto	76	80	10570967	13258	70.55	69.39
12	Sporting CP	76	80	10697656	19500	66.44	64.25
13	Inter	76	81	13710200	53440	69.32	65.88
14	Athletic Club de Bilbao	75	79	9898148	22592	63.93	62.22
15	Beşiktaş JK	75	78	7677884	41230	66	67.88
16	Bayer 04 Leverkusen	75	80	10361111	38851	69.22	68.56

--Players at risk of being transferred based on performance

SELECT

Name, Club, Wage, Value, Overall, Potential FROM cleaned_Fifa_Olympics_dataset WHERE Overall < 75
AND Wage > (SELECT AVG(Wage) FROM cleaned_Fifa_Olympics_dataset) ORDER BY Wage DESC;

	Name	Club	Wage	Value	Overall	Potential
1	O. Kayode	Girona CF	88000	5500000	73	77
2	Sergi Samper	UD Las Palmas	85000	4800000	73	80
3	Marlon Santos	OGC Nice	76000	5500000	73	82
4	De Tomás	Rayo Vallecano	75000	4300000	72	78
5	L. Baker	Middlesbrough	75000	8000000	74	82
6	Lucas Piazon	Fulham	75000	5500000	73	78
7	J. Denayer	Galatasaray SK	72000	7000000	74	81
8	P. Roberts	Celtic	72000	9000000	74	84
9	M. Ødegaard	SC Heerenveen	71000	9500000	74	86
10	Douglas	SL Benfica	71000	2600000	72	72
11	L. Marrone	Bari	71000	3800000	73	74
12	C. Jenkinson	Birmingham City	71000	4000000	73	75
13	Borja Mayoral	Real Madrid CF	68000	5500000	72	84
14	T. Kalas	Fulham	68000	6500000	74	79
15	A. Iwobi	Arsenal	64000	9500000	74	85
16	J. Pied	Southampton	63000	3200000	73	73