

# 1. Distribution of Players by Preferred Foot

A pie chart showing the distribution of players based on their preferred foot (left or right). This visualization helps understand the proportion of left-footed versus right-footed players that are from England.

```
In [9]: SELECT [Preferred Foot], COUNT(*) AS PlayerCount
        FROM [data]
        WHERE Nationality = 'England'
        GROUP BY [Preferred Foot];
```

(3 rows affected)

Total execution time: 00:00:00.022

Out[9]: **Preferred Foot** **PlayerCount**

Left	386
Right	1271
	5

# 2. Showing the top 50 fastest Spanish players in the dataset

This query retrieves the top 50 Spanish players from the [data] table based on their average sprint speed, provided that their average sprint speed is greater than 80. The query converts the SprintSpeed values to integers for accurate average calculation. The results are sorted in descending order of average sprint speed, ensuring that the fastest players appear first. This query can be useful for identifying the fastest Spanish players in the dataset and can be visualized with a bar chart to show the top 50 Spanish players with their average sprint speeds.

```
In [20]: SELECT top 50 [Name], AVG(CAST(SprintSpeed AS int)) AS AvgSprintSpeed
        FROM [data]
        WHERE [Nationality] = 'Spain'
        GROUP BY [Name]
        HAVING AVG(CAST(SprintSpeed AS int )) > 80
        ORDER BY AvgSprintSpeed DESC;
```

(50 rows affected)

Total execution time: 00:00:00.007

Out[20]: **Name** **AvgSprintSpeed**

Adama	96
Williams	94
Jordi Alba	93
Aleix Vidal	93
Vadillo	93
Fernández	92
Gerard Valentín	92
Pol Valentín	92
Juan Villar	91
Héctor Bellerín	91
Rodrigo	91
Ferrán Giner	90
Cristian Tello	89
De Marcos	89
José Calleja	89
Luis Pérez	89
Iñigo Muñoz	88
Jordi Mboula	88
Jesús Navas	88
Deulofeu	88
Mario Hermoso	88
Morales	88
Rubén Peñá	88
Salvi Sánchez	88
Alberto Moreno	87
Gayà	87
Iván Sánchez	87
Raül Cámara	87
Iván Alejo	86
Capa	86
Aitor García	86
Morata	86
Pablo Maffeo	86

Rub��n Sobrino	86
Samu Castillejo	86
Jordi Calavera	85
Jony	85
Dani Nieto	85
Cucurella	85
Angeli��o	85
Luis Valcarce	85
Paco Monta��s	85
Querol	85
Borja Llarena	84
David Ferreira	84
Carvajal	84
Edgar M��ndez	84
Jairo	84
Iriome	84
Lekue	84

### 3. *Distribution of Players' Heights*

*A histogram showing the distribution of players' heights. This visualization helps in understanding the spread and common ranges of player heights in the game.*

In [10]:

Commands completed successfully.

Total execution time: 00:00:00

In [13]:

```
SELECT Height, COUNT(*) AS Frequency
FROM [data]

GROUP BY Height
ORDER BY Height;
```

(22 rows affected)

Total execution time: 00:00:00.010

Out[13]: **Height Frequency**

5'1	3
5'10	2479
5'11	2159
5'2	5
5'3	18
5'4	30
5'5	145
5'6	316
5'7	905
5'8	946
5'9	2238
6'0	2881
6'1	1908
6'2	2015
6'3	990
6'4	749
6'5	246
6'6	93
6'7	21
6'8	10
6'9	2

## 4. Average Sprint Speed BY AGE

*This query calculates the average sprint speed for players grouped by their age. The results are ordered by age, providing a clear view of how sprint speed varies across different ages. The conversion of `SprintSpeed` to an integer ensures that the average calculation is performed correctly.*

```
In [18]: SELECT Age, AVG(CAST(SprintSpeed AS int)) AS AvgSprintSpeed
FROM [data]
GROUP BY Age
ORDER BY Age;
```

(29 rows affected)

Total execution time: 00:00:00.008

Out[18]: **Age AvgSprintSpeed**

16	63
17	61
18	62
19	63
20	65
21	65
22	66
23	67
24	67
25	67
26	67
27	66
28	66
29	63
30	64
31	62
32	58
33	55
34	56
35	48
36	48
37	43
38	40
39	42
40	36
41	44
42	56
44	19
45	57

```
In [2]: SELECT p.Age, AVG(CAST(p.Strength AS INT)) AS AvgStrength
        FROM [data] p
        WHERE p.Nationality = 'Spain'
```

```
GROUP BY p.Age  
HAVING COUNT(p.ID) > 5  
ORDER BY p.Age;
```

(21 rows affected)

Total execution time: 00:00:00.039

Out[2]: **Age AvgStrength**

17	51
18	53
19	54
20	54
21	59
22	58
23	62
24	63
25	65
26	68
27	66
28	69
29	72
30	66
31	70
32	70