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
FernÃ¡ndez	92
Gerard ValentÃn	92
Pol ValentÃn	92
Juan Villar	91
HÃ©ctor BellerÃn	91
Rodrigo	91
FerrÃ¡n Giner	90
Cristian Tello	89
De Marcos	89
JosÃ© CallejÃ³n	89
Luis PÃ©rez	89
IÃ±igo MuÃ±oz	88
Jordi Mboula	88
JesÃºs Navas	88
Deulofeu	88
Mario Hermoso	88
Morales	88
RubÃ©n PeÃ±a	88
Salvi SÃ¡nchez	88
Alberto Moreno	87
GayÃ	87
IvÃ¡n SÃ¡nchez	87
RaÃºl CÃ¡mara	87
IvÃ¡n Alejo	86
Capa	86
Aitor GarcÃa	86
Morata	86
Pablo Maffeo	86

RubÃ©n Sobrino	86
Samu Castillejo	86
Jordi Calavera	85
Jony	85
Dani Nieto	85
Cucurella	85
AngeliÃ±o	85
Luis Valcarce	85
Paco MontaÃ±Ã©s	85
Querol	85
Borja Llarena	84
David Ferreiro	84
Carvajal	84
Edgar MÃ©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

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

Age	AvgSprintSpeed

5 Average Strength of Spanish Players by Age Group with More Than 5 Players

So, the query retrieves the average strength of Spanish players, grouped by age, only including age groups with more than 5 players, and displays them in descending order of age.

In [5]:
```sql
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 desc;
```

(21 rows affected)

Total execution time: 00:00:00.031

Out[5]:

Age	AvgStrength
37	71
36	74
35	71
34	68
33	69
32	70
31	70
30	66
29	72
28	69
27	66
26	68
25	65
24	63
23	62
22	58