# INFORMATICS PRACTICES
# PROJECT WORK

## Creating dataframe

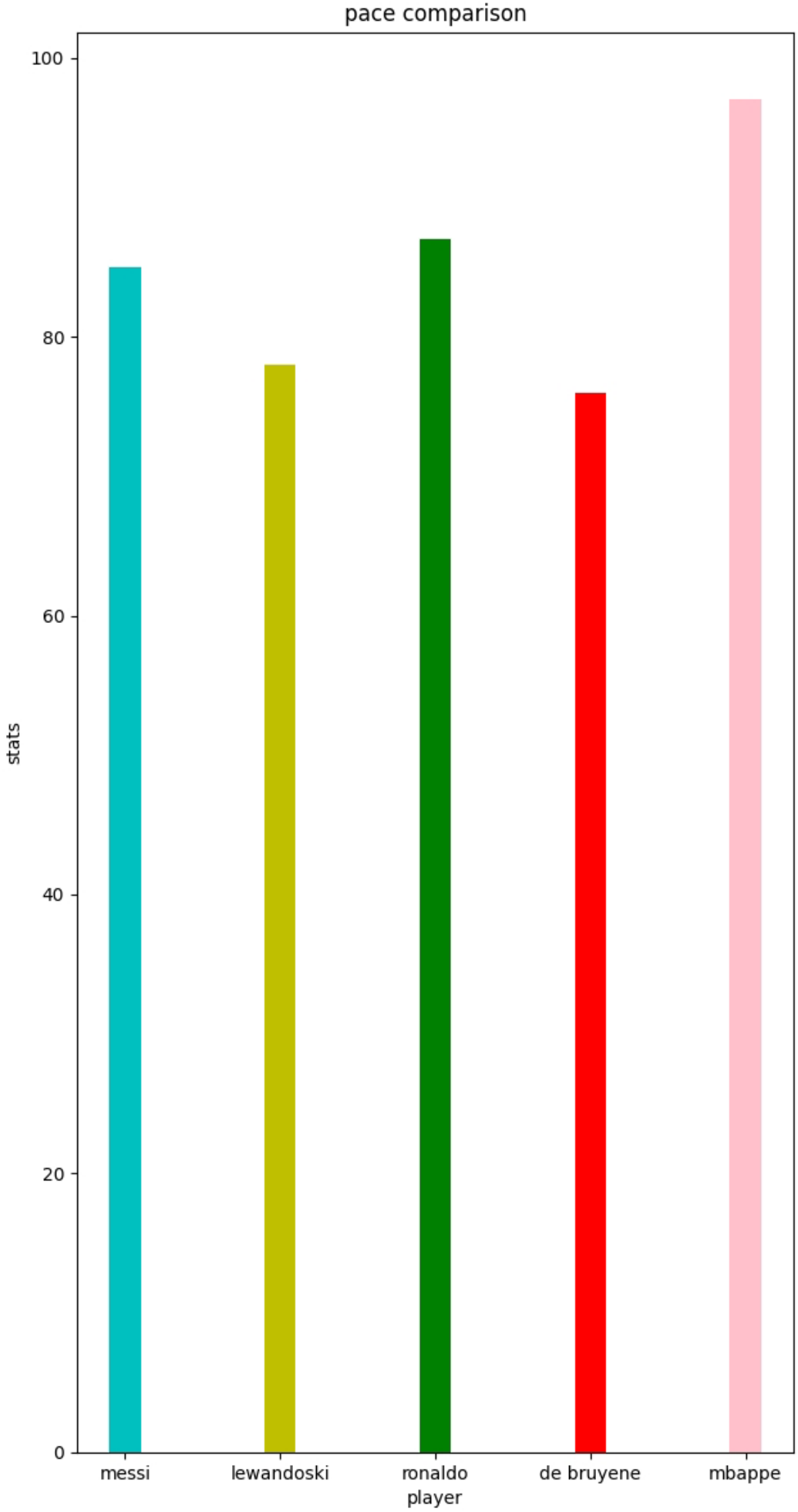
*IN THE FOLLOWING DATA THE PERFORMANCE OF TOP FOOTBALL PLAYERS IS COMPARED AS PER THEIR STATS AND OVERALL RATING*

```
1 import pandas as pd
2
3 S1 = pd.Series([85, 78, 87, 76, 97], index=['messi',
  'lewandoski', 'ronaldo', 'de bruyene', 'Mbappe'])
4 S2 = pd.Series([92, 94, 93, 86, 88], index=['messi',
  'lewandoski', 'ronaldo', 'de bruyene', 'Mbappe'])
5 S3 = pd.Series([91, 79, 82, 93, 80], index=['messi',
  'lewandoski', 'ronaldo', 'de bruyene', 'Mbappe'])
6 data = {'pace': S1, 'shooting': S2, 'passing': S3}
7 df = pd.DataFrame(data)
8 print(df)
9 df.to_csv('player.csv')
```

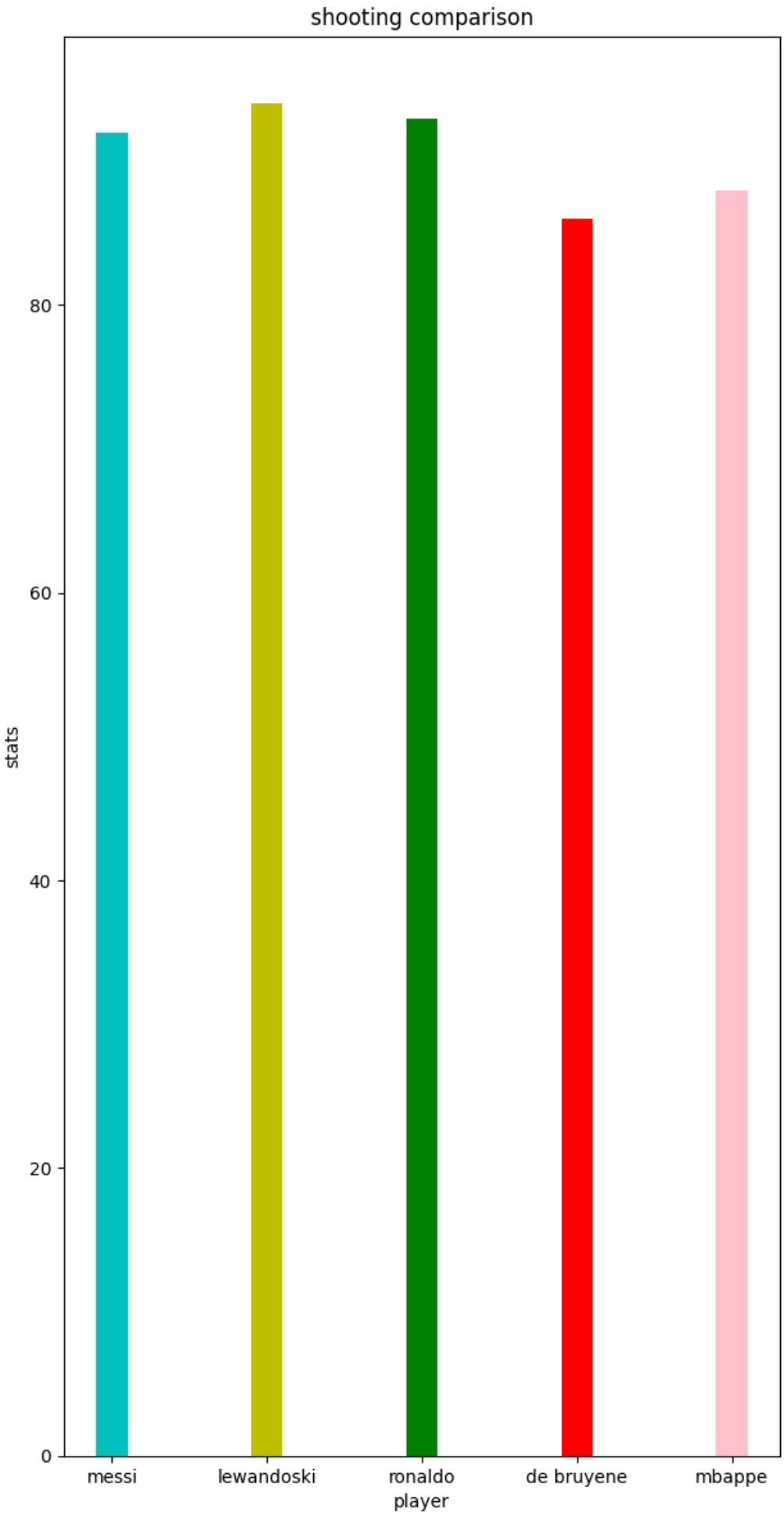
```
             pace  shooting  passing
messi          85        92       91
lewandoski     78        94       79
ronaldo        87        93       82
de bruyene     76        86       93
Mbappe         97        88       80

[Program finished]
```

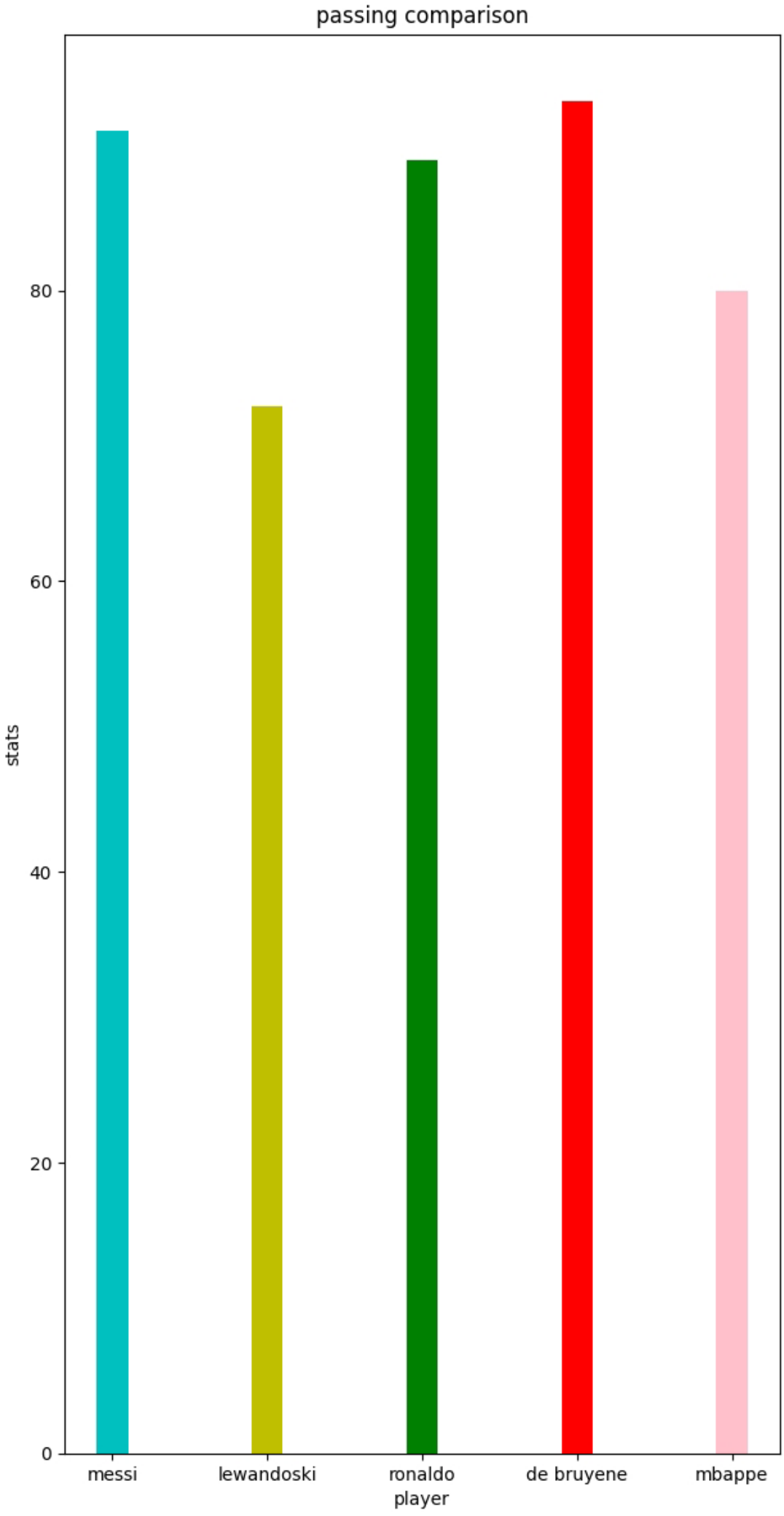
```
1 import matplotlib.pyplot as plt
2 import numpy as np
3 stats=[85,78,87,76,97]
4 player=['messi','lewandoski','ronaldo','de bruyene','mbappe']
5 plt.bar(player,stats,color=['c','y','g','r','pink'],width=0.2)
6 plt.xlabel('player')
7 plt.ylabel('stats')
8 plt.title(' pace comparison ')
9 plt.show()
```


pace comparison
100
80
60
40
20
0
stats
messi
lewandoski
ronaldo
de bruyene
mbappe
player

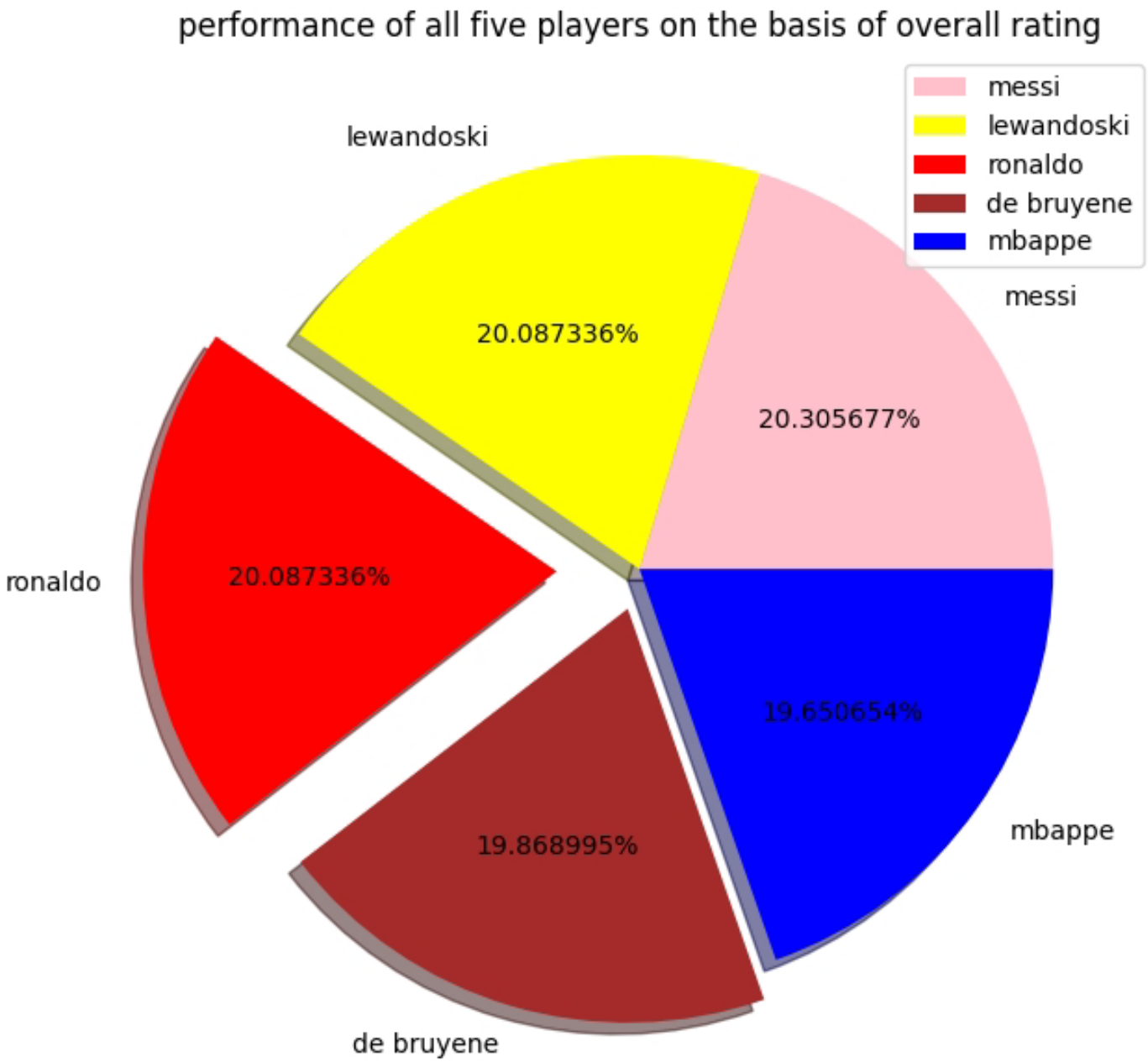
```
1 import matplotlib.pyplot as plt
2 import numpy as np
3 stats=[92,94,93,86,88]
4 player=['messi','lewandoski','ronaldo','de bruyene','mbappe']
5 plt.bar(player,stats,color=['c','y','g','r','pink'],width=0.2)
6 plt.xlabel('player')
7 plt.ylabel('stats')
8 plt.title(' shooting comparison ')
9 plt.show()
```


shooting comparison
stats
0
20
40
60
80
messi
lewandoski
ronaldo
de bruyene
mbappe
player

```
1 import matplotlib.pyplot as plt
2 import numpy as np
3 stats=[91,72,89,93,80]
4 player=['messi','lewandoski','ronaldo','de bruyene','mbappe']
5 plt.bar(player,stats,color=['c','y','g','r','pink'],width=0.2)
6 plt.xlabel('player')
7 plt.ylabel('stats')
8 plt.title(' passing comparison ')
9 plt.show()
```


passing comparison
stats
0
20
40
60
80
messi
lewandoski
ronaldo
de bruyene
mbappe
player

```
1  import matplotlib.pyplot as plt
2  slices=(93,92,92,91,90)
3  player=('messi','lewandoski','ronaldo','de bruyene','mbappe')
4  cols=['pink','yellow','red','brown','blue']
5  exp=[0,0,0.2,0.1,0]
6  plt.pie(slices, labels=player,colors=cols, explode=exp,
   shadow=True,autopct='%1f%%')
7  plt.title('performance of all five players on the basis of
   overall rating')
8  plt.legend()
9  plt.show()
```


performance of all five players on the basis of overall rating
messi
lewandoski
ronaldo
de bruyene
mbappe
lewandoski
messi
20.087336%
20.305677%
ronaldo
20.087336%
19.650654%
mbappe
19.868995%
de bruyene