

"""

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Program: soccerStats.py.

"""

# Global variable to store the list of player statistics

listOfStats = []

def ProcessStatsFile():

# Ask the user for the path to the file

file\_path = input("Enter the path to the stats file: ")

try:

# Open the file and read each line

with open(file\_path, 'r') as file:

for line in file:

# Split each line into a list of stats and append to listOfStats

player\_stats = line.strip().split(';')

listOfStats.append(player\_stats)

# Print the number of players processed

print(f"Number of players processed: {len(listOfStats)}")

except FileNotFoundError:

print("The file was not found. Please check the path and try again.")

```
def CalculateCardTotal():  
    total_cards = 0  
  
    # Loop through each player stat in listOfStats  
    for stats in listOfStats:  
        # Add the number of yellow and red cards to the total  
        total_cards += int(stats[14]) + int(stats[15])  
  
    # Print the total number of cards issued to the team  
    print(f"Total number of cards issued to the team: {total_cards}")
```

```
def FindBestGoalToShotRatio():  
    best_ratio = 0  
    best_player = ("", "", 0) # (First Name, Last Name, Ratio)  
  
    # Loop through each player stat in listOfStats  
    for stats in listOfStats:  
        goals = int(stats[5])  
        shots = int(stats[7])  
  
        # Compute the goal-to-shot ratio  
        if shots > 0: # Avoid division by zero  
            ratio = goals / shots  
            # Check if this player has the best ratio  
            if ratio > best_ratio:
```

```
best_ratio = ratio
```

```
best_player = (stats[0], stats[1], ratio)
```

```
# Print the player's name and their goal-to-shot ratio as a percentage
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```
print(f"Best goal-to-shot ratio: {best_player[0]} {best_player[1]} with a ratio of  
{best_player[2] * 100:.2f}%")
```