Milestone 3 Screenshots

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DSC350-T301

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```python
JelinekMilestone3.py > ...
 1  ∨ import pandas as pd
 2    import csv
 3
 4    # read csv
 5    df = pd.read_csv('FootBallDataAPI.csv')
 6
 7    # empty the irrelevant data
 8    df.drop(df.index, inplace=True)
 9
10    # change columns
11    new_column_names = ['player_name', 'position', 'stats',
      'team', 'hall_of_fame_class', 'seasons']
12
13    # create an empty DataFrame with specified columns
14    df = pd.DataFrame(columns=new_column_names)
15    |
16    # add Hall of Fame Heisman Winner Stats
17  ∨ player_data = [
18        ['OJ Simpson', 'RB', 'Rushing Yards: 11236, Receiving
          Yards: 2142, Touchdowns: 76', 'Buffalo Bills, 49ers',
          '1985', '11'],
19        ['Roger Staubach', 'QB', 'Passing Yards: 22700, Rushing
          TDs: 20, Rushing Yards: 2264, Touchdown Passes: 153',
          'Dallas Cowboys', '1986', '11'],
20        ['Paul Hornung', 'RB', 'Rushing Yards: 3711, Receiving
          Yards: 1480, Touchdowns: 62', 'Green Bay Packers',
          '1986', '9'],
21        ['Doak Walker', 'RB', 'Rushing Yards: 1520, Receiving
          Yards: 2539, Touchdowns: 33', 'Detroit Lions', '1986',
          '6'],
22        ['Earl Campbell', 'RB', 'Rushing Yards: 9407, Receiving
          Yards: 806, Touchdowns: 74', 'Houston Oilers, New Orleans
          Saints', '1991', '8'],
23        ['Tony Dorsett', 'RB', 'Rushing Yards: 12739, Receiving
          Yards: 3554, Touchdowns: 90', 'Dallas Cowboys, Denver
          Broncos', '1994', '12'],
24        ['Marcus Allen', 'RB', 'Rushing Yards: 12243, Receiving
          Yards: 5411, Touchdowns: 188', 'Los Angeles Raiders,
          Kansas City Chiefs', '2003', '16'],
25        ['Barry Sanders', 'RB', 'Rushing Yards: 15269, Receiving
          Yards: 2921, Touchdowns: 140', 'Detroit Lions', '2004',
          '10'],
```

```python
     ['Tim Brown', 'WR', 'Receiving Yards: 14934, Touchdowns:
     100', 'Los Angeles Raiders, Oakland Raiders, Tampa Bay
     Buccaneers', '2015', '17'],
     ['Charles Woodson', 'CB/S', 'Interceptions: 65,
     Touchdowns: 11', 'Oakland Raiders, Green Bay Packers',
     '2021', '18']
]

# write data to csv file
with open("FootBallDataAPI.csv", "w", newline="") as csvfile:
    writer=csv.writer(csvfile)
    writer.writerows(player_data)

# add player
new_player_data = [
    [
        'Ricky Williams',
        'RB',
        'Rushing Yards: 10009, Receiving Yards: 2606,
        Touchdowns: 74',
        'New Orleans Saints, Miami Dolphins, Baltimore
        Ravens',
        '2015',
        '12'
    ]
]

# format data and parse stats column into individual stats
df['Rushing_Yards'] = df['stats'].str.extract(r'Rushing
Yards: (\d+)').astype(float)
df['Receiving_Yards'] = df['stats'].str.extract(r'Receiving
Yards: (\d+)').astype(float)
df['Touchdowns'] = df['stats'].str.extract(r'Touchdowns: (\d+)
').astype(int)

# fix casing and inconsistent values
df['team'] = df['team'].str.replace('Buffalo Bills, 49ers',
'Buffalo Bills, San Francisco 49ers')

# remove duplicates
df.drop_duplicates(inplace=True)
```

```
57
58    # append player_data to the DataFrame
59    df = (pd.DataFrame(player_data, columns=new_column_names))
60
61    # append new_player_data to DataFrame
62    df = pd.concat([df, pd.DataFrame(new_player_data,
      columns=new_column_names)], ignore_index=True)
63
64    df.to_csv('FootBallDataAPI.csv', index=False)
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   ...   ⊡ Python + ∨ ⊡ 🗑 ... ∧ ✕

```
PS C:\Users\mstga\OneDrive\Desktop\Bellevue\DataWranglingForDataScience\TermP
roject> & C:/ProgramData/anaconda3/python.exe c:/Users/mstga/OneDrive/Desktop
/Bellevue/DataWranglingForDataScience/TermProject/JelinekMilestone3.py
PS C:\Users\mstga\OneDrive\Desktop\Bellevue\DataWranglingForDataScience\TermP
roject> ▯
```

	A	B	C	D	E	F	G
1	player_na	position	stats	team	hall_of_fa	seasons	
2	OJ Simpsc	RB	Rushing Y	Buffalo Bil	1985	11	
3	Roger Stat	QB	Passing Y	Dallas Cov	1986	11	
4	Paul Horn	RB	Rushing Y	Green Bay	1986	9	
5	Doak Wall	RB	Rushing Y	Detroit Lio	1986	6	
6	Earl Camp	RB	Rushing Y	Houston C	1991	8	
7	Tony Dors	RB	Rushing Y	Dallas Cov	1994	12	
8	Marcus Al	RB	Rushing Y	Los Angele	2003	16	
9	Barry Sanc	RB	Rushing Y	Detroit Lio	2004	10	
10	Tim Browr	WR	Receiving	Los Angele	2015	17	
11	Charles W	CB/S	Interceptic	Oakland F	2021	18	
12	Ricky Willi	RB	Rushing Y	New Orlea	2015	12	
13							