

Evaluation-3

```
[1]: import numpy as np
import matplotlib as plt
import pandas
#Seasons
Seasons = _
    ↳ ["2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014"]
Sdict = {"2005":0, "2006":1, "2007":2, "2008":3, "2009":4, "2010":5, "2011":6, "2012":
    ↳ 7, "2013":8, "2014":9}

#Players
Players = _
    ↳ ["KobeBryant", "JoeJohnson", "LeBronJames", "CarmeloAnthony", "DwightHoward", "ChrisBosh", "Chris
Pdict = {"KobeBryant":0, "JoeJohnson":1, "LeBronJames":2, "CarmeloAnthony":
    ↳ 3, "DwightHoward":4, "ChrisBosh":5, "ChrisPaul":6, "KevinDurant":7, "DerrickRose":
    ↳ 8, "DwayneWade":9}

#Salaries
KobeBryant_Salary = _
    ↳ [15946875, 17718750, 19490625, 21262500, 23034375, 24806250, 25244493, 27849149, 30453805, 23500000]
JoeJohnson_Salary = _
    ↳ [12000000, 12744189, 13488377, 14232567, 14976754, 16324500, 18038573, 19752645, 21466718, 23180790]
LeBronJames_Salary = _
    ↳ [4621800, 5828090, 13041250, 14410581, 15779912, 14500000, 16022500, 17545000, 19067500, 20644400]
CarmeloAnthony_Salary = _
    ↳ [3713640, 4694041, 13041250, 14410581, 15779912, 17149243, 18518574, 19450000, 22407474, 22458000]
DwightHoward_Salary = _
    ↳ [4493160, 4806720, 6061274, 13758000, 15202590, 16647180, 18091770, 19536360, 20513178, 21436271]
ChrisBosh_Salary = _
    ↳ [3348000, 4235220, 12455000, 14410581, 15779912, 14500000, 16022500, 17545000, 19067500, 20644400]
ChrisPaul_Salary = _
    ↳ [3144240, 3380160, 3615960, 4574189, 13520500, 14940153, 16359805, 17779458, 18668431, 20068563]
KevinDurant_Salary = _
    ↳ [0, 0, 4171200, 4484040, 4796880, 6053663, 15506632, 16669630, 17832627, 18995624]
DerrickRose_Salary = _
    ↳ [0, 0, 0, 4822800, 5184480, 5546160, 6993708, 16402500, 17632688, 18862875]
```

```

DwayneWade_Salary = ␣
    ↪ [3031920, 3841443, 13041250, 14410581, 15779912, 14200000, 15691000, 17182000, 18673000, 15000000]

#Matrix
Salary = np.array([KobeBryant_Salary, JoeJohnson_Salary, LeBronJames_Salary, ␣
    ↪ CarmeloAnthony_Salary, DwightHoward_Salary, ChrisBosh_Salary, ␣
    ↪ ChrisPaul_Salary, KevinDurant_Salary, DerrickRose_Salary, DwayneWade_Salary])

#Games
KobeBryant_G = [80, 77, 82, 82, 73, 82, 58, 78, 6, 35]
JoeJohnson_G = [82, 57, 82, 79, 76, 72, 60, 72, 79, 80]
LeBronJames_G = [79, 78, 75, 81, 76, 79, 62, 76, 77, 69]
CarmeloAnthony_G = [80, 65, 77, 66, 69, 77, 55, 67, 77, 40]
DwightHoward_G = [82, 82, 82, 79, 82, 78, 54, 76, 71, 41]
ChrisBosh_G = [70, 69, 67, 77, 70, 77, 57, 74, 79, 44]
ChrisPaul_G = [78, 64, 80, 78, 45, 80, 60, 70, 62, 82]
KevinDurant_G = [35, 35, 80, 74, 82, 78, 66, 81, 81, 27]
DerrickRose_G = [40, 40, 40, 81, 78, 81, 39, 0, 10, 51]
DwayneWade_G = [75, 51, 51, 79, 77, 76, 49, 69, 54, 62]

#Matrix
Games = np.array([KobeBryant_G, JoeJohnson_G, LeBronJames_G, CarmeloAnthony_G, ␣
    ↪ DwightHoward_G, ChrisBosh_G, ChrisPaul_G, KevinDurant_G, DerrickRose_G, ␣
    ↪ DwayneWade_G])

#Minutes Played
KobeBryant_MP = [3277, 3140, 3192, 2960, 2835, 2779, 2232, 3013, 177, 1207]
JoeJohnson_MP = [3340, 2359, 3343, 3124, 2886, 2554, 2127, 2642, 2575, 2791]
LeBronJames_MP = [3361, 3190, 3027, 3054, 2966, 3063, 2326, 2877, 2902, 2493]
CarmeloAnthony_MP = [2941, 2486, 2806, 2277, 2634, 2751, 1876, 2482, 2982, 1428]
DwightHoward_MP = [3021, 3023, 3088, 2821, 2843, 2935, 2070, 2722, 2396, 1223]
ChrisBosh_MP = [2751, 2658, 2425, 2928, 2526, 2795, 2007, 2454, 2531, 1556]
ChrisPaul_MP = [2808, 2353, 3006, 3002, 1712, 2880, 2181, 2335, 2171, 2857]
KevinDurant_MP = [1255, 1255, 2768, 2885, 3239, 3038, 2546, 3119, 3122, 913]
DerrickRose_MP = [1168, 1168, 1168, 3000, 2871, 3026, 1375, 0, 311, 1530]
DwayneWade_MP = [2892, 1931, 1954, 3048, 2792, 2823, 1625, 2391, 1775, 1971]

#Matrix
MinutesPlayed = np.array([KobeBryant_MP, JoeJohnson_MP, LeBronJames_MP, ␣
    ↪ CarmeloAnthony_MP, DwightHoward_MP, ChrisBosh_MP, ChrisPaul_MP, ␣
    ↪ KevinDurant_MP, DerrickRose_MP, DwayneWade_MP])

#Field Goals
KobeBryant_FG = [978, 813, 775, 800, 716, 740, 574, 738, 31, 266]
JoeJohnson_FG = [632, 536, 647, 620, 635, 514, 423, 445, 462, 446]
LeBronJames_FG = [875, 772, 794, 789, 768, 758, 621, 765, 767, 624]
CarmeloAnthony_FG = [756, 691, 728, 535, 688, 684, 441, 669, 743, 358]
DwightHoward_FG = [468, 526, 583, 560, 510, 619, 416, 470, 473, 251]
ChrisBosh_FG = [549, 543, 507, 615, 600, 524, 393, 485, 492, 343]
ChrisPaul_FG = [407, 381, 630, 631, 314, 430, 425, 412, 406, 568]

```

```

KevinDurant_FG = [306,306,587,661,794,711,643,731,849,238]
DerrickRose_FG = [208,208,208,574,672,711,302,0,58,338]
DwayneWade_FG = [699,472,439,854,719,692,416,569,415,509]
#Matrix
FieldGoals = np.array([KobeBryant_FG, JoeJohnson_FG, LeBronJames_FG,
    ↪CarmeloAnthony_FG, DwightHoward_FG, ChrisBosh_FG, ChrisPaul_FG,
    ↪KevinDurant_FG, DerrickRose_FG, DwayneWade_FG])

#Field Goal Attempts
KobeBryant_FGA = [2173,1757,1690,1712,1569,1639,1336,1595,73,713]
JoeJohnson_FGA = [1395,1139,1497,1420,1386,1161,931,1052,1018,1025]
LeBronJames_FGA = [1823,1621,1642,1613,1528,1485,1169,1354,1353,1279]
CarmeloAnthony_FGA = [1572,1453,1481,1207,1502,1503,1025,1489,1643,806]
DwightHoward_FGA = [881,873,974,979,834,1044,726,813,800,423]
ChrisBosh_FGA = [1087,1094,1027,1263,1158,1056,807,907,953,745]
ChrisPaul_FGA = [947,871,1291,1255,637,928,890,856,870,1170]
KevinDurant_FGA = [647,647,1366,1390,1668,1538,1297,1433,1688,467]
DerrickRose_FGA = [436,436,436,1208,1373,1597,695,0,164,835]
DwayneWade_FGA = [1413,962,937,1739,1511,1384,837,1093,761,1084]
#Matrix
FieldGoalAttempts = np.array([KobeBryant_FGA, JoeJohnson_FGA, LeBronJames_FGA,
    ↪CarmeloAnthony_FGA, DwightHoward_FGA, ChrisBosh_FGA, ChrisPaul_FGA,
    ↪KevinDurant_FGA, DerrickRose_FGA, DwayneWade_FGA])

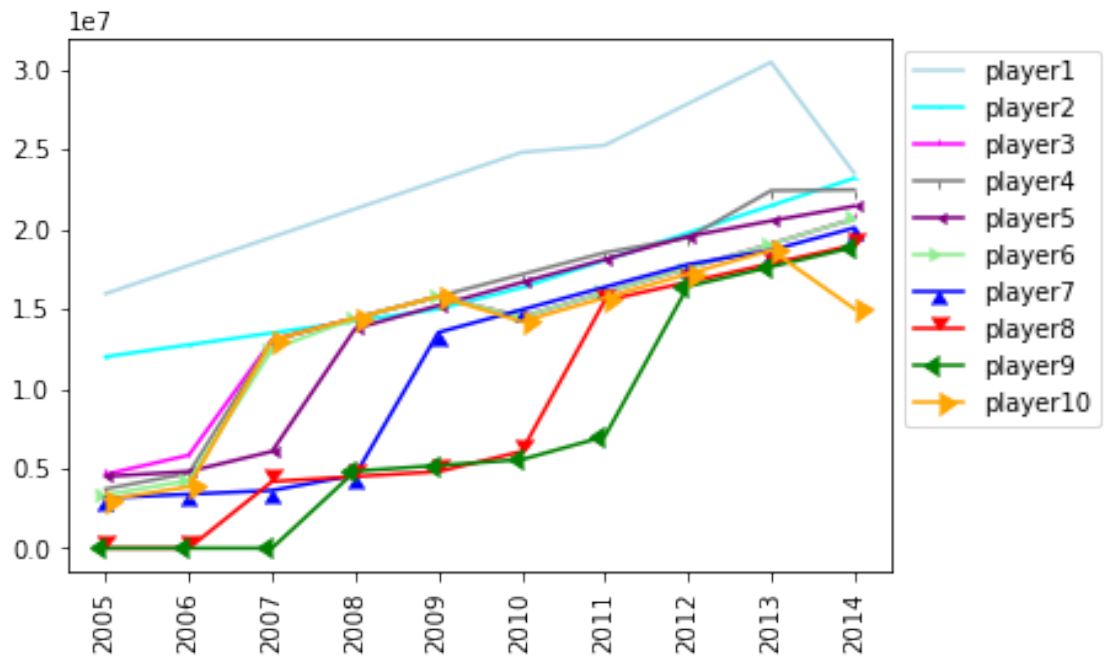
#Points
KobeBryant_PTS = [2832,2430,2323,2201,1970,2078,1616,2133,83,782]
JoeJohnson_PTS = [1653,1426,1779,1688,1619,1312,1129,1170,1245,1154]
LeBronJames_PTS = [2478,2132,2250,2304,2258,2111,1683,2036,2089,1743]
CarmeloAnthony_PTS = [2122,1881,1978,1504,1943,1970,1245,1920,2112,966]
DwightHoward_PTS = [1292,1443,1695,1624,1503,1784,1113,1296,1297,646]
ChrisBosh_PTS = [1572,1561,1496,1746,1678,1438,1025,1232,1281,928]
ChrisPaul_PTS = [1258,1104,1684,1781,841,1268,1189,1186,1185,1564]
KevinDurant_PTS = [903,903,1624,1871,2472,2161,1850,2280,2593,686]
DerrickRose_PTS = [597,597,597,1361,1619,2026,852,0,159,904]
DwayneWade_PTS = [2040,1397,1254,2386,2045,1941,1082,1463,1028,1331]
#Matrix

```

```

[2]: #plot a graph of y against x
import matplotlib.pyplot as plt
lab=["player1","player2","player3","player4","player5","player6","player7","player8","player9"]
col=["lightblue","cyan","magenta","grey","purple","lightgreen","blue","red","green","orange"]
for i in range(10):
    plt.plot(Salary[i],c=col[i],ls='-',marker=i,ms=i,label=lab[i])
    plt.xticks(np.arange(0,10),Seasons,rotation="vertical")
    plt.legend(loc="upper left",bbox_to_anchor=(1,1))
plt.show()

```



[]: