

## PRACTICA DE SIMULACION - REGRESION FIFA

### EDWIN MARQUEZ

#### COMPUTACION

1. Con los datos de Fifa, organizar a los jugadores de acuerdo al peso en las siguientes €

```
# Imports y carga de datos
import pandas as pd
import numpy as np
import matplotlib.pyplot as plot
import matplotlib.patches as ptch
import plotly.express as px

data = pd.read_csv('fifa_datos.csv')
data
```

	Unnamed: 0	ID	Name	Age	Photo
<b>0</b>	0	158023	L. Messi	31	<a href="https://cdn.sofifa.org/players/4/19/158023.png">https://cdn.sofifa.org/players/4/19/158023.png</a>
<b>1</b>	1	20801	Cristiano Ronaldo	33	<a href="https://cdn.sofifa.org/players/4/19/20801.png">https://cdn.sofifa.org/players/4/19/20801.png</a>
<b>2</b>	2	190871	Neymar Jr	26	<a href="https://cdn.sofifa.org/players/4/19/190871.png">https://cdn.sofifa.org/players/4/19/190871.png</a>
<b>3</b>	3	193080	De Gea	27	<a href="https://cdn.sofifa.org/players/4/19/193080.png">https://cdn.sofifa.org/players/4/19/193080.png</a>
<b>4</b>	4	192985	K. De Bruyne	27	<a href="https://cdn.sofifa.org/players/4/19/192985.png">https://cdn.sofifa.org/players/4/19/192985.png</a>
...	...	...	...	...	...
<b>18202</b>	18202	238813	J. Lundstram	19	<a href="https://cdn.sofifa.org/players/4/19/238813.png">https://cdn.sofifa.org/players/4/19/238813.png</a>
<b>18203</b>	18203	243165	N. Christoffersson	19	<a href="https://cdn.sofifa.org/players/4/19/243165.png">https://cdn.sofifa.org/players/4/19/243165.png</a>
<b>18204</b>	18204	241638	B. Worman	16	<a href="https://cdn.sofifa.org/players/4/19/241638.png">https://cdn.sofifa.org/players/4/19/241638.png</a>
<b>18205</b>	18205	246268	D. Walker-Rice	17	<a href="https://cdn.sofifa.org/players/4/19/246268.png">https://cdn.sofifa.org/players/4/19/246268.png</a>
<b>18206</b>	18206	246269	G. Nugent	16	<a href="https://cdn.sofifa.org/players/4/19/246269.png">https://cdn.sofifa.org/players/4/19/246269.png</a>

18207 rows × 89 columns

```
r1 = 125
r2 = 150
r3 = 175
```

```
data_fifa = pd.DataFrame()
data_fifa['id'] = data['ID']
data_fifa['nombre'] = data['Name']
data_fifa['edad'] = data['Age']
data_fifa['nacionalidad'] = data['Nationality']
data_fifa['peso'] = data['Weight']
data_fifa['estatura'] = data['Height']
data_fifa['potencial'] = data['Potential']
data_fifa['puntaje'] = data['Overall']
```

```
for i in range(len(data_fifa)):
    data_fifa['peso'][i] = str(data_fifa['peso'][i])
    data_fifa['peso'][i] = data_fifa['peso'][i][0:3]
    data_fifa['peso'][i] = float(data_fifa['peso'][i])
```

```
data_fifa.dropna(subset = ["peso"], inplace=True)
```

/usr/local/lib/python3.7/dist-packages/ipykernel\_launcher.py:16: SettingWithCopyWarn

A value is trying to be set on a copy of a slice from a DataFrame

See the caveats in the documentation: <https://pandas.pydata.org/pandas-docs/stable/u>

/usr/local/lib/python3.7/dist-packages/ipykernel\_launcher.py:17: SettingWithCopyWarn

A value is trying to be set on a copy of a slice from a DataFrame

See the caveats in the documentation: <https://pandas.pydata.org/pandas-docs/stable/u>

/usr/local/lib/python3.7/dist-packages/ipykernel\_launcher.py:18: SettingWithCopyWarn

A value is trying to be set on a copy of a slice from a DataFrame

See the caveats in the documentation: <https://pandas.pydata.org/pandas-docs/stable/u>



```
# Creación de los contadores necesarios
```

```
cont1 = 0
cont2 = 0
cont3 = 0
cont4 = 0
```

```
cont5 = 0
cont6 = 0
cont8 = 0
cont7 = 0
cont9 = 0
cont10 = 0
```

```
cont11 = 0
```

```
for i in data_fifa['peso']:  
    if i < r1:  
        cont1 = cont1+1  
    elif i > r1 and i < r2:  
        cont2 = cont2+1  
    elif i > r2 and i < r3:  
        cont3 = cont3+1  
    elif i > r3:  
        cont4 = cont4+1
```

```
for i in data_fifa['puntaje']:  
    if i < 40:  
        cont5 = cont5+1  
    elif i < 50:  
        cont6 = cont6+1  
    elif i < 60:  
        cont7 = cont7+1  
    elif i < 70:  
        cont8 = cont8+1  
    elif i < 80:  
        cont9 = cont9+1  
    elif i < 90:  
        cont10 = cont10+1  
    elif i < 100:  
        cont11 = cont11+1
```

```
# Gráfico de barra
```

```
datos1 = [cont5, cont6, cont7, cont8, cont9, cont10, cont11]  
labels1 = ["<40", "<50", "<60", "<70", "<80", "<90", "<100"]
```

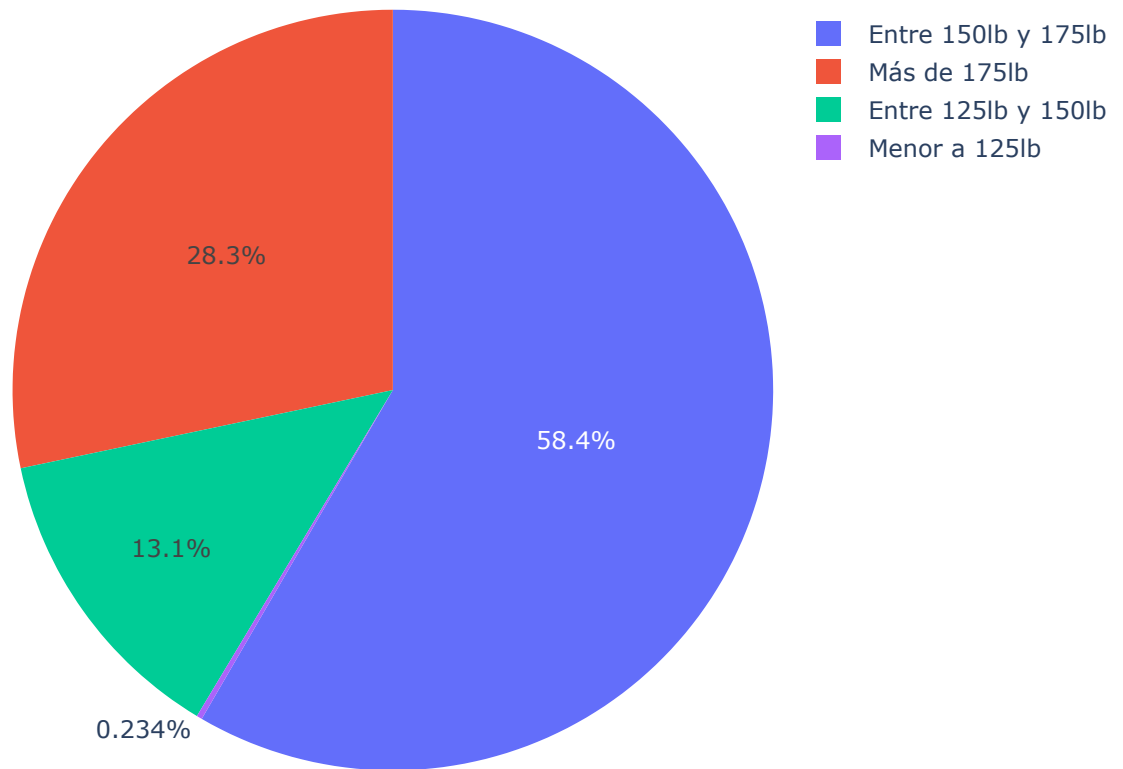
```
fig = plot.figure()  
ax = fig.add_axes([0,0,1,1])  
ax.bar(labels1, datos1)
```

```

<BarContainer object of 7 artists>
# Gráfico de pastel libreria plotly.express
datos = [cont1,cont2,cont3,cont4]
labels = ["Menor a 125lb", "Entre 125lb y 150lb", "Entre 150lb y 175lb", "Más de 175lb"]

fig = px.pie(values = datos , names = labels)
fig.show()

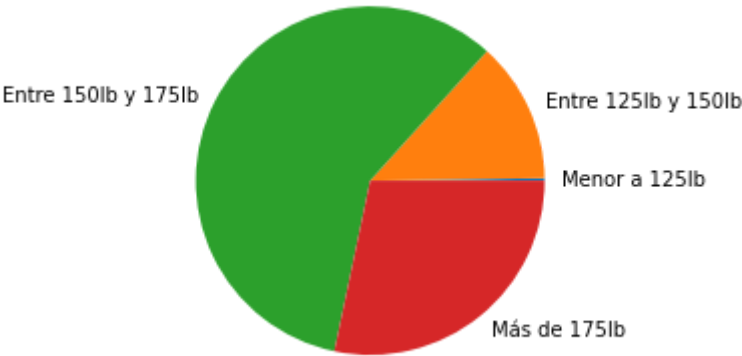
```



```

# Gráfico de pastel matplotlib.pyplot
datos = [cont1,cont2,cont3,cont4]
labels = ["Menor a 125lb", "Entre 125lb y 150lb", "Entre 150lb y 175lb", "Más de 175lb"]
plot.pie(datos, labels=labels)
plot.show()

```



✓ 1 s completado a las 22:02

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