

In [34]:

```
import seaborn as sns
import matplotlib.pyplot as plt
import pandas as pd
```

In [36]:

```
file_path = r"C:\Users\vinee\Downloads\myexcel - myexcel.csv.csv"
dataset= pd.read_csv(file_path)
```

In [37]:

```
print(dataset.columns)
```

```
Index(['Name', 'Team', 'Number', 'Position', 'Age', 'Height', 'Weight',
       'College', 'Salary'],
      dtype='object')
```

1.How many are there in each team and the percentage splitting with respect to the total employees.

In [38]:

```
# number of employee in each team
team_count = dataset['Team'].value_counts()
team_count
```

Out[38]:

New Orleans Pelicans	19
Memphis Grizzlies	18
Utah Jazz	16
New York Knicks	16
Milwaukee Bucks	16
Brooklyn Nets	15
Portland Trail Blazers	15
Oklahoma City Thunder	15
Denver Nuggets	15
Washington Wizards	15
Miami Heat	15
Charlotte Hornets	15
Atlanta Hawks	15
San Antonio Spurs	15
Houston Rockets	15
Boston Celtics	15
Indiana Pacers	15
Detroit Pistons	15
Cleveland Cavaliers	15
Chicago Bulls	15
Sacramento Kings	15
Phoenix Suns	15
Los Angeles Lakers	15
Los Angeles Clippers	15
Golden State Warriors	15
Toronto Raptors	15
Philadelphia 76ers	15
Dallas Mavericks	15
Orlando Magic	14
Minnesota Timberwolves	14

Name: Team, dtype: int64

In [39]:

```
# the percentage splitting with respect to the total employees
total_employees = len(dataset)
team_percentage = (team_count / total_employees) * 100
a = pd.DataFrame({'Number of Employees': team_count, 'Percentage of Employees': team_percentage})
print("percentage splitting with respect to the total employees")
print(a)
```

percentage splitting with respect to the total employees

	Number of Employees	Percentage of Employees
New Orleans Pelicans	19	4.148472
Memphis Grizzlies	18	3.930131
Utah Jazz	16	3.493450
New York Knicks	16	3.493450
Milwaukee Bucks	16	3.493450
Brooklyn Nets	15	3.275109
Portland Trail Blazers	15	3.275109
Oklahoma City Thunder	15	3.275109
Denver Nuggets	15	3.275109
Washington Wizards	15	3.275109
Miami Heat	15	3.275109
Charlotte Hornets	15	3.275109
Atlanta Hawks	15	3.275109
San Antonio Spurs	15	3.275109
Houston Rockets	15	3.275109
Boston Celtics	15	3.275109
Indiana Pacers	15	3.275109
Detroit Pistons	15	3.275109
Cleveland Cavaliers	15	3.275109
Chicago Bulls	15	3.275109
Sacramento Kings	15	3.275109
Phoenix Suns	15	3.275109
Los Angeles Lakers	15	3.275109
Los Angeles Clippers	15	3.275109
Golden State Warriors	15	3.275109
Toronto Raptors	15	3.275109
Philadelphia 76ers	15	3.275109
Dallas Mavericks	15	3.275109
Orlando Magic	14	3.056769
Minnesota Timberwolves	14	3.056769

2.Segregate the employees w.r.t different positions.

In [40]:

```
#the employees by their positions
pos = dataset.groupby('Position')
pos_count = pos.size()
b = pd.DataFrame({'Number of Employees': pos_count})
print("Employees w.r.t different Positions:")
print(b)
```

Employees w.r.t different Positions:
Number of Employees

Position	Number of Employees
C	79
PF	100
PG	92
SF	85
SG	102

3.Find from which age group most of the employees belong to.

In [41]:

```
age_group_count = dataset['Age'].value_counts()
age_groups = [(18, 21), (21, 24), (24, 27), (27, 30), (30, 33), (33, 36)]
age_grp= ['18-21', '21-24', '24-27', '27-30', '30-33', '33-36']
# using cut func to Categorize the employees into age groups
d = pd.cut(dataset['Age'], bins=len(age_groups), labels=age_grp)
#no_of eomplyees in each age group
age_group_counts = d.value_counts()
print("Number of Employees in Age Group:")
age_group_counts
```

Number of Employees in Age Group:

Out[41]:

21-24	170
24-27	100
27-30	80
18-21	66
30-33	29
33-36	13

Name: Age, dtype: int64

In [42]:

```
# age group with most of employees
max_age = age_group_counts.idxmax()
print("Age Group with Most Employees:", max_age)
```

Age Group with Most Employees: 21-24

4. Find out under which team and positions, spending in terms of salary is high

In [43]:

```
team_spending = dataset.groupby(['Team', 'Position'])['Salary'].sum()
#team and position with the highest spending
high_spend = team_spending.idxmax()
high_spend
print("Team with Highest Spending:", high_spend[0])
print("Position with Highest Spending:", high_spend[1])
```

Team with Highest Spending: Los Angeles Lakers

Position with Highest Spending: SF

5. Find if there is any correlation between age and salary, represent it visually.

In [45]:

```
import matplotlib.pyplot as plt
correlation = dataset['Age'].corr(dataset['Salary'])
print("Correlation between Age and Salary:", correlation)
plt.scatter(dataset['Age'], dataset['Salary'])
plt.xlabel('Age')
plt.ylabel('Salary')
plt.title('Age vs Salary')
plt.show()
```

Correlation between Age and Salary: 0.21400941226570974



In []: