Question

```
#use us_births data to compute the following using np:
#extract the year, gender and births column from the data
#compute the aggregation of sum of total birth, sum of female birth and sum of male birth, mean and med
ian
#compute the maximum births and minimum births
#indicate the gender with minimum birth and maximum birth
#indicate the year with minimum birth and maximum birth
```

In [93]:

```
import numpy as np
import pandas as pd
```

In [155]:
```
birth = pd.read_csv('C:\\Users\\AYODEJI\\Desktop\\Numpy class\\Datasets - Copy\\us_births.csv')
one=birth.drop(["month","day"], axis = 1)
one
```

Out[155]:

	year	gender	births
0	1969	F	4046
1	1969	M	4440
2	1969	F	4454
3	1969	M	4548
4	1969	F	4548
...	...	...	...
15542	2008	M	183219
15543	2008	F	158939
15544	2008	M	165468
15545	2008	F	173215
15546	2008	M	181235

15547 rows × 3 columns

In [42]:
```
print("sum of total birth:",np.sum( birth["births"]))
```

```
sum of total birth: 151774378
```

In [136]:
```
data = one[(one["gender"] == "F")]
data
print("sum of female birth is >>", data["births"].sum())
print("mean of female birth is >>", data["births"].mean())
print("median of female birth is >>", data["births"].median())
```

```
sum of female birth is >> 74035823
mean of female birth is >> 9521.067772633745
median of female birth is >> 4688.5
```

In [161]:
```
data1 = one[(one["gender"] == "M")]
data1
print("sum of male birth is >>", data1["births"].sum())
print("mean of male birth is >>", data1["births"].mean())
print("median of male birth is >>", data1["births"].median())
```

```
sum of male birth is >> 77738555
mean of male birth is >> 10003.674559258783
median of male birth is >> 4938.0
```

In [163]:
```
print("the highiest number of births within a year is >>",one["births"].max())
print("the lowestest number of births within a year is >>",one["births"].min())
```

```
the highiest number of births within a year is >> 199622
the lowestest number of births within a year is >> 1
```

In [152]:
```
print("the gender with the highiest birth is >>", one["gender"][one["births"].argmax()])
print("the gender with the lowest birth is >>", one["gender"][one["births"].argmin()])
```

```
the gender with the highiest birth is >> M
the gender with the lowest birth is >> F
```

In [154]:
```
print("the year with the highiest birth is >>", one["year"][one["births"].argmax()])
print("the year with the lowest birth is >>", one["year"][one["births"].argmin()])
```

```
the year with the highiest birth is >> 2007
the year with the lowest birth is >> 1975
```