# Team Name : Super Mario
# Project Title : Visual History of Nobel Prize Winners

Member 1 : Youhanna Adel == 37-14779
Member 2 : Nader Waguih == 37-6772
Member 3 : Bishoy Raafat == 37-15522
Member 4 : Danial Malak == 37-2220

CSEN1095 : DATA ENGINEERING

# Work Distribution:

## 1) Data Cleaning:
- Bishoy Raafat
- Nader Waguih

-Removing Null Values

-Removing False Data

# Null Values Count

```
Year                      0
Category                  0
Prize                     0
Motivation               88
Prize Share               0
Laureate ID               0
Laureate Type             0
Full Name                 0
Birth Date               29
Birth City               28
Birth Country            26
Sex                      26
Organization Name       247
Organization City       253
Organization Country    253
Death Date              352
Death City              370
Death Country           364
dtype: int64
```

# Approach To Remove The Null Values

```python
for i in range (df.shape[0]):
    year = df.at[i,'Year']
    laureate = df.at[i, 'Laureate Type']
    if(laureate == "Organization"):
        if(pd.isnull(df.at[i,'Birth Date'])):
            df.at[i,'Birth Date'] = "Started Before " + str(year)
        if(pd.isnull(df.at[i,'Birth City'])):
            df.at[i,'Birth City'] = "Organization/No Birth City"
        if(pd.isnull(df.at[i,'Birth Country'])):
            df.at[i,'Birth Country'] = "Organization/No Birth Country"
    if(laureate == "Individual"):
        if(pd.isnull(df.at[i,'Birth Date'])):
            df.at[i,'Birth Date'] = "Born Before " + str(year)
        if(pd.isnull(df.at[i,'Birth City'])):
            df.at[i,'Birth City'] = "Not Available"
        if(pd.isnull(df.at[i,'Birth Country'])):
            df.at[i,'Birth Country'] = "Not Available"
```
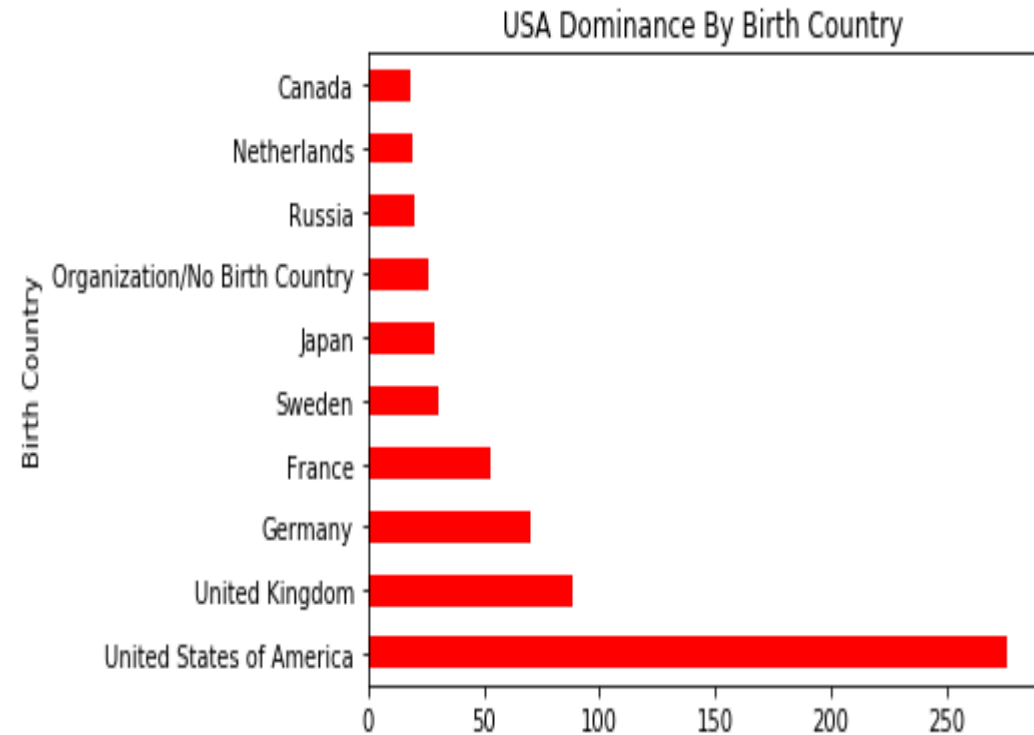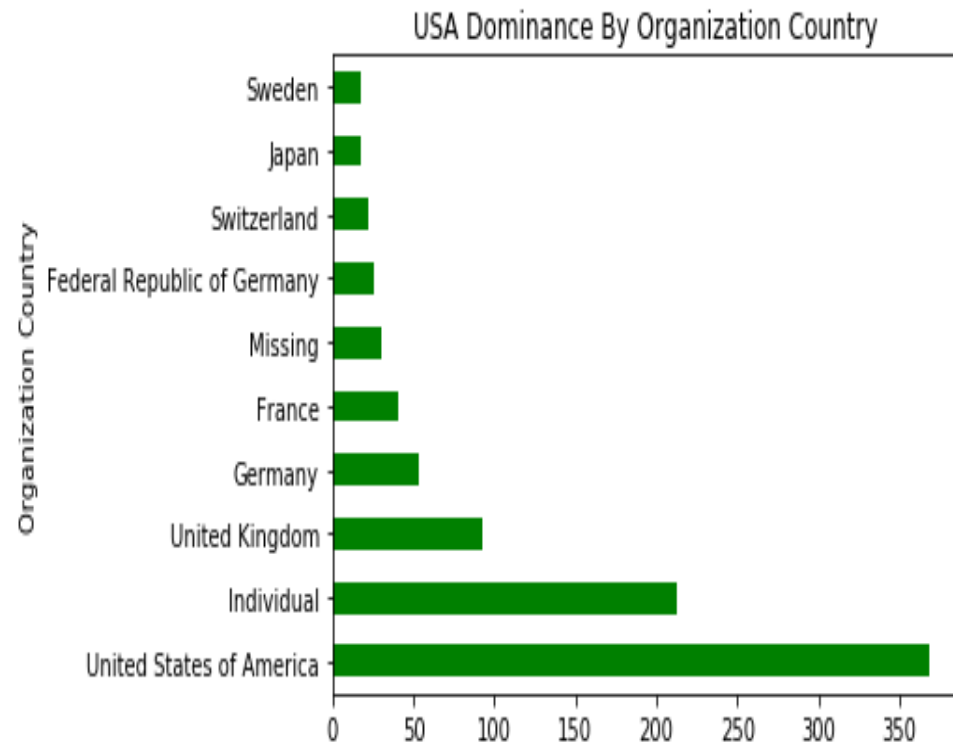
# Work Distribution:

## 2) Questions & Visualizations:

- Youhanna Adel
- Danial Malak

-What does the dataset tell us ?
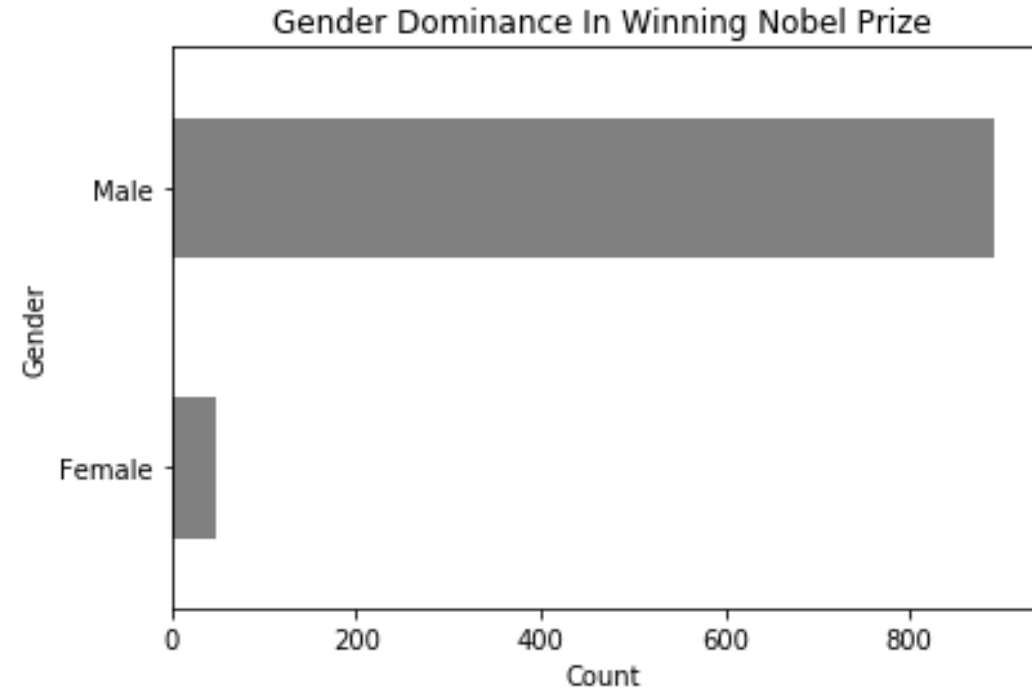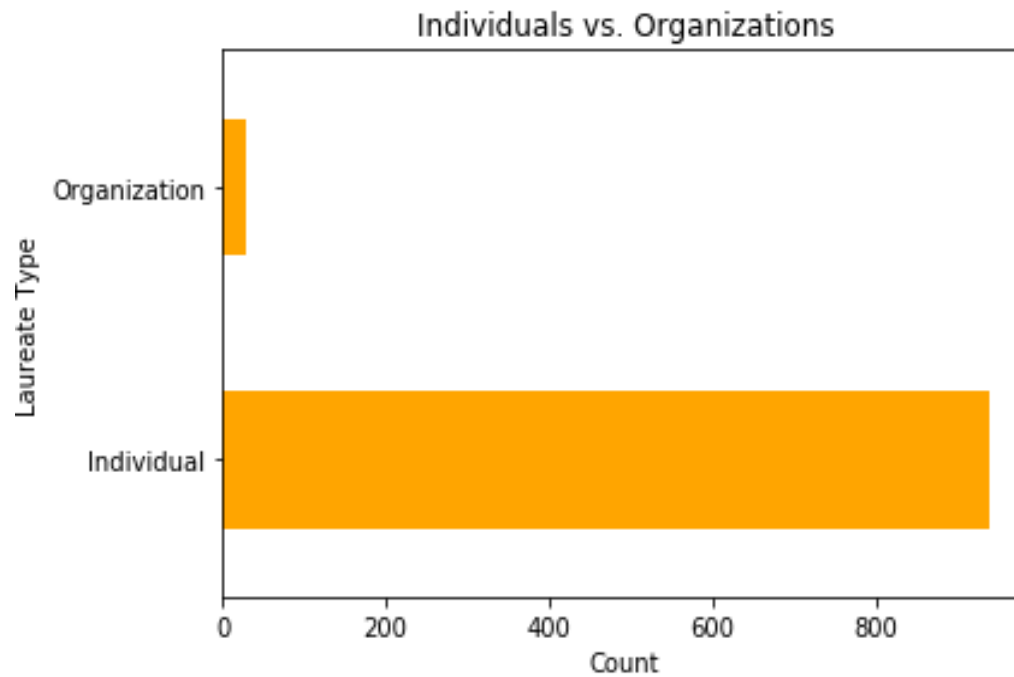
-What are the most important visualizations ?

# USA Dominance

# Male Vs. Female
# Individuals Vs. Organizations

# Average age for winning a Nobel Prize ? Youngest And Oldest Winners ?

```
The Average Age For Winning A Nobel Prize Is : 59 Years Old


Oldest Winner Is : Leonid Hurwicz With Age : 90
Youngest Winner Is : Malala Yousafzai With Age : 17
```

# Thank You