1. **Heaviest Pumpkin Information** The details of heaviest pumpkin in the dataset **Weight:** 2692.98 lbs **Variety:** Kikuza **Location:** Nottingham, California, Mexico **Year:** 2456
2. **Average Weight by Country：**The average pumpkin weight for the three selected countries is as follows: France: 359.47 kg, Mexico: 356.42 kg, USA: 346.05 kg. France has the highest average pumpkin weight among the three countries, and closely by Mexico and then the USA.
3. **Lowest Average Weight by Variety for Each Country:** The varieties with the lowest average weight in each country are France: Queensland Blue 355.48 kg, Mexico: Kikuza 350.83 kg, USA: Pumpkin Pie 340.04 kg.
   1. **Relationship Between Estimated and Actual Weight:**

Figure name: actual\_vs\_estimated\_weight.png. This scatter plot illustrates the relationship between the actual weight (in kg) and the estimated weight (in lbs). Pumpkins are categorized by weight class (Light, Medium, and Heavy). There is a clear trend that higher estimated weights correspond to heavier pumpkins.

* 1. **Weight Distribution by Country:**

Figure name: weight\_distribution\_by\_country.pngThis boxplot compares the distribution of pumpkin weights across the three selected countries (USA, Mexico, France). France shows the highest median weight and a wider range of weights, showing that greater diversity in pumpkin sizes.

* 1. **Weight Distribution by Variety and Country:**

Figure name: weight\_distribution\_by\_variety.png This facet grid boxplot breaks down the weight distribution by pumpkin variety within each country. There is a large overlap between countries for certain breeds.

**5. France consistently outperforms the USA and Mexico in terms of average pumpkin weight. The variety Kikuza has the highest maximum weight, but it also has significant weight variance. Queensland Blue consistently shows lower weights of the country.**

**6. Generated Files:**

**pumpkins\_filtered.csv** that contains only data from USA, Mexico, and France.

**actual\_vs\_estimated\_weight.png** is a scatter plot of estimated vs. actual weights.

**weight\_distribution\_by\_country.png** is an oxplot of weights by country.

**weight\_distribution\_by\_variety.png** is a facet grid boxplot by variety and country.

**pythonPUMPKINS.py** contains the full analysis workflow, from data loading to visualization.