**\*\* Note\*\***

The data being analyzed pertains to the individual medals being awarded to individual athletes. Not the count of medals awarded to each country, per event.

**Question:** How have the top 3 countries with most medals per athlete changed over time after WWII? How does it compare between the Summer and Winter Olympics?

* To answer the questions, I decided to analyze both Summer and Winter Olympics results at intervals of every 8 competitions. This means I will be analyzing the results of the 1948, 1980, and 2012 Summer Olympic Games. And the results of 1948, 1980, and 2010 Winter Olympic Games.
* First, let's talk about the top 3 countries with most medals per athlete for the Summer Olympic Games:
  + Soon after the end of the Second World War, the Summer Olympic Games were held in London during 1948. As we can see the graphs below, the United States was the country with most individual medals awarded, followed by Sweden and France, competing close for second and third place. During the 1980 Summer Olympic Games, the panorama of the top three finishers changed completely. With the first-place finish being awarded to the back then, USSR, followed by what was back then identified as East Germany, and the third-place finish falling to Czechoslovakia. During the 2012 Summer Olympic Games, the United States rose back to the top of the table, but the second and third-placed finished were awarded countries that had not been represented earlier. The second-place finish went to China, and the third-place finish to the United Kingdom.
* Now, we will compare the results of the top three finishers of the Winter Olympic Games.
  + Soon after the Summer Olympic Games, the Winter Olympic Games were held in St. Moritz, during the same year. As we will be able to see in the graphs, Canada was the country with the most individual medals awarded, followed by the United States and Sweden. During the 1980 Winter Olympic Games, the USSR, East Germany, and United States, took the first, second, and third place finishes, respectively. The only country to be repeated from the 1948 games was the United States. During the 2010 Winter Games, Canada once again rose to the occasion and took the place for the first place. Second and third place were distributed to Germany, and Norway, respectively.
* Finally, we will compare the results of the Summer Olympic Games against the Winter Olympic Games.
  + When comparing the results of the 1948 Summer Olympic Games against the 1948 Summer Olympic Games, we can see a correlation between the top three finishers. The top two finishers for the Summer Olympic Games were United States and Sweden. During the 1980 Winter Olympic Games, the United States were the second and third placed countries for this event.
  + When looking at the 1980 Olympic Games, we can again notice a positive correlation between the top three finishers. The USSR and East Germany took first and second place in both Summer and Winter Olympic Games. The third place, however, was distributed to Czechoslovakia for the Summer Games, and to the United States for the Winter Games.

**\*\* Note\*\***

The Summer Olympic Games and the Winter Olympic Games were held during the same year up until 1992, when they started overlapping the competitions every two years.

* + The first instance where we can observe a negative correlation between the top three finishers is when we compare the 2010 Winter Olympic Games to the 2012 Summer Olympic Games. No repeat country was found.

Conclusion:

* There seems to be generally a positive correlation between the top three finishers of the Summer and Winter Olympic Games, specifically, when they were held in the same year. After the International Olympic Committee started overlapping the competitions, we observed a negative correlation. More analysis would need to be performed to gain better insight on this topic.

**The next page will include the graphs used to analyze and compare the data.**

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