MOBILE PRICE ANALYSIS

1. Data Overview
The dataset contains information about mobile phone specifications and their respective price range. It includes 2000 rows and 21 columns, with features like battery power, Bluetooth, RAM, and 4G/3G support.

2. Data Cleaning and Transformation
Columns were renamed for clarity, and categorical values were converted (e.g., 0/1 to No/Yes for Bluetooth and 3G/4G). The `price_range` was transformed into categories: "Low Cost", "Medium Cost", "High Cost", and "Very High Cost". There were no missing values.

3. Correlation Analysis
Key features correlated with price range include:

- RAM (strongest correlation)
- Battery power
- Pixel resolution (height and width)

4. Visualization Insights

- **Bar Plots**: Phones with 3G and Bluetooth support are more common in higher price ranges.
- **Scatter Plots**: Screen size and pixel resolution have a noticeable relationship with the price range, especially for higher-end phones.