* **Key Metrics:**
* Height (No Shoes)
* Height (With Shoes)
* Wingspan
* Standing reach
* Weight
* Vertical (Max)
* Body Fat Percentage
* **Relationships:**
* Correlation matrix and heatmap
* Pairwise scatter plots
* Statistical summaries
* Linear regression models to understand relationships between key metrics

### **Insights:**

* **Correlation Heatmap:**

1. Height (No Shoes) and Height (With Shoes) are highly correlated, as expected.
2. Wingspan and Standing Reach are highly correlated, indicating that players with longer wingspans tend to have higher standing reaches.
3. Weight has a moderate negative correlation with Body Fat Percentage, suggesting that heavier players tend to have lower body fat percentages.

* **Pairwise Scatter Plots:**

1. The pairplots provide a visual overview of the relationships between key metrics.

1. Height (With Shoes) and Wingspan show a positive linear

relationship.

1. Vertical (Max) does not show a strong relationship with Weight, suggesting other factors influence jumping ability.

* **Linear Regression Analysis:**

1. A simple linear regression model predicting Vertical (Max) based on Weight and Height (With Shoes) provides insights into how these metrics influence jumping ability.
2. The regression summary shows the coefficients and their significance, helping identify which metrics are more influential.

* **Regression Plots:**

1. The regression plots highlight the relationship between Vertical (Max) and predictors (Weight, Height (With Shoes)), showing the fitted regression line.
2. These plots can help understand how changes in Weight or Height (With Shoes) are associated with changes in Vertical (Max).