**Properties of Regression Line:**

1. **All pass through (xmean, ymean)**
2. **Sum of residuals is zero**
3. **It is placed so that sum of residuals squared is as small as possible**
4. **It is not resistant to outliers (normal or influential)**
5. **It is not resistant due to the mean used in calculation**
6. **It requires we have an explanatory and response variable meaning if you flip x and y variables, a and b will change unlike r and r squared**