#POLYNOMIAL REGRESSION

↳ relation b/w x (feature) and y is modeled as an nth degree polynomial.

↳ instead of fitting a st-line on ~~curve~~ data we fit a curve on data.

higher the degree of polynomial the more complex the model is, for this type linear regression gives high error

- converting two features A and B

↳ 1, A, B, A^2, AB, B^2 (upto 2nd degree)

$y = \beta_0 A + \beta_1 B + \beta_2 A^2 + \beta_3 B^2 + \beta_4 AB$ + (intercept)

(polynomial equation)

↓

- 1 : Bias value
- A^2, B^2 : values raised to the power
- AB : interaction b/w features