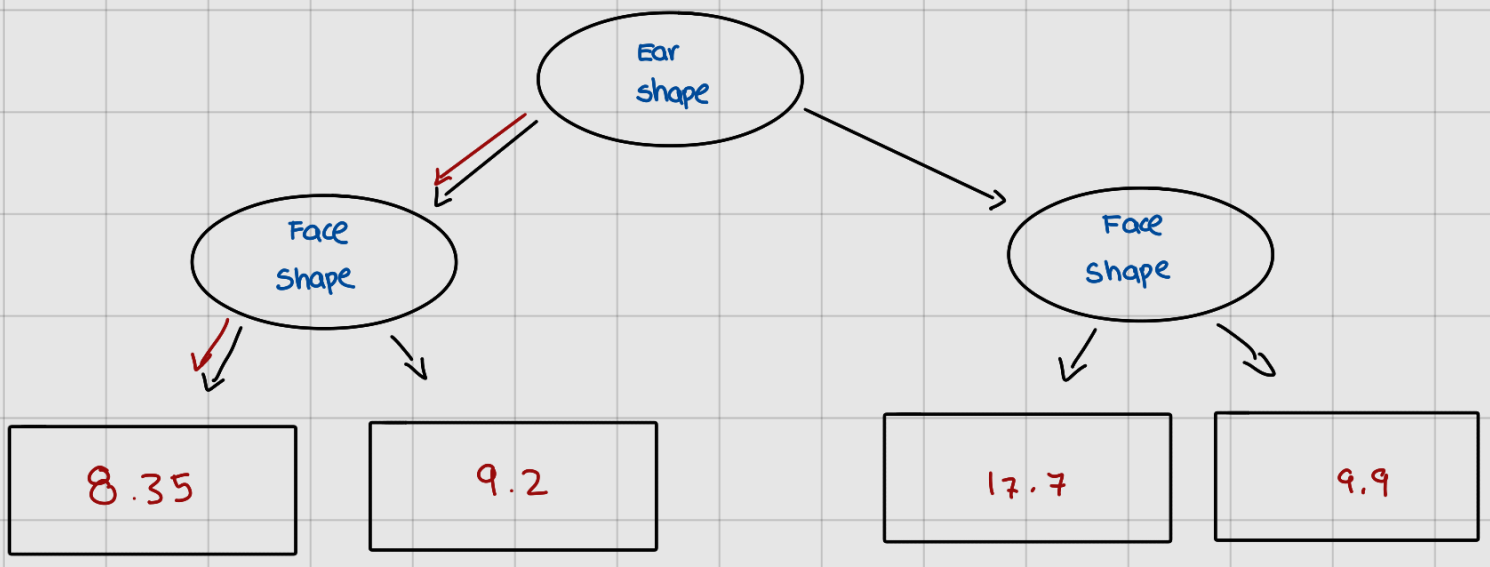
Regression Trees



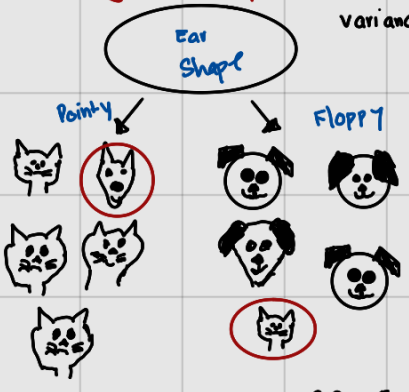
Weights :
7.2 , 8.6 , 7.6 , 10.2

Weights :
9.2

Weights :
15, 18, 20

Weights :
8.8 , 11

Choosing a Split



variance at root node : 20.51

Weights : 7.2 , 9.2 , 8.4 , 7.6 , 10.2
variance : 1.47
$w^{left} = 5/10$

Weights : 8.8 , 15 , 11 , 18 , 20
Variance : 21.87
$w^{right} = 5/10$

$$20.51 - \left(\left(\frac{5}{10} * 1.47\right) + \left(\frac{5}{10} * 21.87\right)\right)$$

$= 8.84$ ← You choose the largest reduction in variance