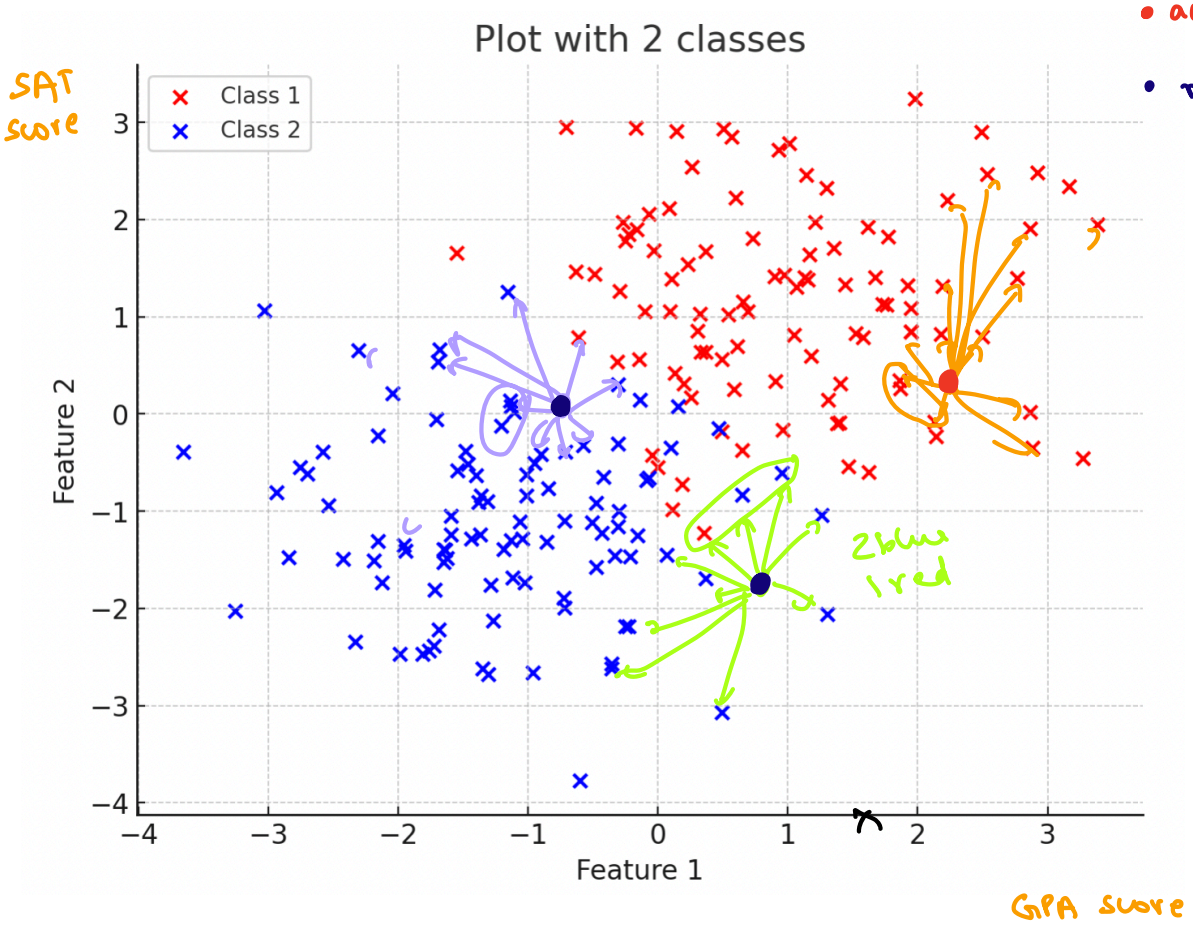

$k = 3$

→ for each point in test set, find distance to every point in the training set.

→ sort distances by ascending order

↔ pick top k distances (choose an odd k, helpful for tie breaking)

→ find majority class

→ assign test point to majority class.

Euclidean Distance formula: $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2 + \cdots\cdots}$

$$= \sqrt{\sum_{i=1}^{n} (q_i - p_i)^2}$$