Wenxin Xu   Quiz 2

Answer:

$$Label = \begin{cases} +1 & f_k(x) > 0 \\ -1 & f_k(x) < 0 \end{cases}$$

In knn classification, $f_k(x)$ is the majority vote of neighbors of x,

$$f_K(x) = \text{mode}(\{y_i \mid i \in N_k(x)\})$$

thus, the sign of the sum of yi determines the majority vote, if positive, mode is label +1, if negative, mode is label -1.