MP Neuron Learning Algorithm

How do we train our model

1.

	phone 1	phone 2	phone 3	phone 4	phone 5	phone 6	phone 7	phone 8	phone 9	phone 10
Launch (within 6 months) x_1	0	1	1	0	0	1	0	1	1	0
Weight (<160g) x_2	1	0	1	0	0	0	1	0	0	1
Screen Size (< 5.9in) x_3	1	0	1	0	1	0	1	0	1	0
Dual sim x_4	1	1	0	0	0	1	0	1	0	0
Internal mem(>= 64gb, 4gb ram) x_5	1	1	1	1	1	1	1	1	1	0
NFC x_6	0	1	1	0	1	0	1	1	1	0
Radio x_7	1	0	0	1	1	1	0	0	0	0
Battery (>= 3500mAh) x_8	0	0	0	1	0	1	0	1	0	0
Price? (> 20k) x_9	0	1	1	0	0	0	1	1	1	0
Liked (y)	1	0	1	0	1	1	0	1	0	0
Prediction $\widehat{y}$	?	?	?	?	?	?	?	?	?	?

2. $\widehat{y} = (\Sigma^n_{i=1} x_i >= b)$
3. cost/loss $= \Sigma_i (y_i - \widehat{y}_i)^2$
4. In this case, we have <u>only one parameter</u>, so we can afford to use <u>brute force search</u>.
   a. Here, consider we have n features
   b. b can only range from 0 to n, else it would be a pointless parameter
   c. b has discrete values only, as the inputs are also discrete values