

Age  $\Rightarrow$  10-19, 20-29, 30-39, 40-49

Income  $\Rightarrow$   $\leq 20,000$ , 20,001-39,999, 40,000-59,999, 60,000-80,000

Applicant ID	Age	Income	Education Level	Defaulted
1	20-29	$\leq 20,000$	High school	No
2	30-39	40,000-50,000	Bachelor's	No
3	40-49	60,000-80,000	Master's	No
4	20-29	20,001-39,999	High School	No
5	30-39	40,000-59,999	Bachelor's	Yes
6	40-49	60,000-80,000	Master's	No
7	20-29	$\leq 20,000$	High School	Yes
8	30-39	60,000-80,000	Bachelor's	No
9	30-39	40,000-59,999	Bachelor's	No
10	20-29	20,001-39,999	High School	Yes

30-39 40,000-59,999 Bachelor's ?

$P(X|H) \Rightarrow P(\text{Defaulted} = \text{Yes} | \text{Age} = 30-39,$

$P(C_i) = P(\text{Defaulted} = \text{"Yes"}) = 3/10 = 0.3$

$P(\text{Defaulted} = \text{"No"}) = 7/10 = 0.7$

$P(X|C_i)$  for each class

$P(\text{Age} =$