

### Converting cumulative probabilities to binary

Based on our example in class, come up with pseudocode for converting a cumulative probability into binary. Your function should take as input a float (the probability) and return a string (the binary representation after the decimal point).

### Converting features: continuous to discrete

Consider the following data table with one feature (temperature) and an output label ‘Y’ for playing tennis and ‘N’ for not playing tennis:

temp	label
80	Y
48	Y
60	N
48	N
40	N
48	Y
90	Y

Follow the steps below to convert this continuous feature to several discrete ones.

1. Sort examples based on the feature:
2. Different label with the same feature value? Collapse to “None”:
3. Whenever the label changes, make a feature (average adjacent feature values):

4. Write out the new data as it would look after feature conversion.