**1.0 Algorithm: ID3 Decision Tree**

ID3 stands for Iterative Dichotomiser 3 and is named such because the algorithm iteratively (repeatedly) dichotomizes(divides) features into two or more groups at each step.

ID3 algorithm is to create the smallest decision tree using entropy and information gain. Decision is the label(target) of the dataset and Path is each value of the column values.

**1.1 The Math Behind**

**1.2 Psuedo Code**

**1.3 Scratch Code**

**1.4 (Library:scikit,tensorflow) Code**