**README**

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Language used: Java

**Code Structure**:

Initially the program reads information from a text file that is specified on the command line. The probability distributions for the following four variables are then calculated: B, G, C, and F. The output of the resulting probability distributions are printed.

After that, a function called "fun" performs Inference and Enumeration Method for command-line parameters . The individual probabilities of each variable are multiplied to generate the joint probability distribution (JPD) of the variables under consideration. Finally,  JPD is printed.

**How to Run**:

**compilation command** : javac Bnet.java

**running commands**:

Task 1: java Bnet.java training\_data.txt

Task 2: java Bnet.java training\_data.txt <Bt/Bf> <Gt/Gf> <Ct/Cf> <Ft/Ff>

Task 3: java Bnet.java training\_data.txt <query variable values> given <evidence variables>