```
Finished finding grams of size: 1
Finished finding grams of size: 2
Finished finding grams of size: 3
Finished finding grams of size: 4
Finished finding grams of size: 5
Finished finding grams of size: 6
Finished finding grams of size: 7
Finished finding grams of size: 8
Finished finding grams of size: 9
Finished finding grams of size: 10
Getting the most probable char for the first 10 chars of the dev set
        with a probability of: 0.16224152357947383. Actual: C
Guess: o with a probability of: 0.14820786241494666. Actual: o
Guess: n with a probability of: 0.2942118319504155. Actual: n
Guess: t with a probability of: 0.3640711400409705. Actual: f
Guess: i with a probability of: 0.6210286771615658. Actual: u
Guess: c with a probability of: 0.9478949335108975. Actual: c
Guess: i with a probability of: 0.9999014442558306. Actual: i
Guess: u with a probability of: 0.9999933028916673. Actual: u
Guess: s with a probability of: 0.9999997718881248. Actual: s
Guess: : with a probability of: 0.7368416778716915. Actual: :
Finding Perplexity
Perplexity: 7.692236049287026
Testing percent correct on the test file
Percent correct: 0.6008306414397785
Problem 3: Chinese Model
Finished finding grams of size: 1
Finished finding grams of size: 2
Finished finding grams of size: 3
Most probable symbols with percents for first 10 symbols of dev
Symbol: p has probability: 0.014917255102490295
```

```
Symbol: i has probability: 0.023915678918005848
Symbol: g has probability: 0.011111813339921516
Symbol: g has probability: 0.011111813339921516
Symbol: y has probability: 0.007919704604258953
Symbol: b has probability: 0.00905204856103741
Symbol: o has probability: 0.028244919534154176
Symbol: x has probability: 0.004323495107699556
Symbol: has probability: 0.02816160966164701
Symbol: has probability: 0.06597998264856449
```

Percent correct on test set: 0.8706338939197931