Summary:

	RF1	RF2	RF3	Training Set
orfs: max min avg	-1.09861228867 -38.2929427266 -13.3491956633	-1.09861228867 -39.7972199092 -14.3265399805	-1.09861228867 -37.5487691014 -16.3929968701	-33.257101837 -37.5408582619 -35.2796448016
noncoding: max min avg	-1.09861228867 -9.45820624719 -6.76836142806	-1.50407739678 -9.57127127325 -6.82626342182	-1.09861228867 -9.77132884372 -6.80933729646	-4.52178857705 -9.1345489323 -6.65260758123

Program brief description:

3 python modules:

1. orf.py
2. prob_model2.py
3. training.py

The orf.py module reads in the FASTA file, contains the ORF_FINDER class which collects the potential ORFs and noncoding regions in a given reading frame.

The training.py reads in the training data and formats it for the prob_model2.py module.

The prob_model2.py contains the ZEROTH class which logs and sums the probabilities. I wrote a demo() function in this module the output of that can be seen below.

Program output:

Reading frame 1 open reading frames scores max, min, avg:

-1.09861228867
-38.2929427266
-13.3491956633

Reading frame 2 open reading frames scores max, min, avg:

-1.09861228867
-39.7972199092
-14.3265399805

Reading frame 3 open reading frames scores max, min, avg:

-1.09861228867
-37.5487691014
-16.3929968701

Reading frame 1 noncoding regions scores max, min, avg:

-1.09861228867
-9.45820624719
-6.76836142806

Reading frame 2 noncoding regions scores max, min, avg:

-1.50407739678
-9.57127127325
-6.82626342182

Reading frame 3 noncoding regions scores max, min, avg:

-1.09861228867
-9.77132884372
-6.80933729646

Training set data orfs scores max, min, avg:

-33.257101837
-37.5408582619
-35.2796448016

Training set data noncoding scores max, min, avg:

-4.52178857705
-9.1345489323
-6.65260758123