How to run the code:

* To compile the code:
  + javac Main.java
  + javac CreateFragments.java
  + javac MergeFragments.java
* To generate a set of similar sequences (Part 1 of assignment), run the following command:

java Main <sequence length> <A values> <B values> <C values> <D values> <number of sequences> <mutation probability> <outputfileName.txt>

example:

java Main 100 25 25 25 25 10 0.1 “outputfile.txt”

Note: Please make sure to give “.txt” extension in filename and put the file name in double quotes

* To partition the sequences in a ﬁle into small fragments, (Part 2 of assignment):

java CreateFragments <inputFileName> <minimum length of each fragment> <maximum length of each fragment> <outputFileName>

example: java CreateFragments “outputfile.txt” 20 50 “fragments.txt”

Note: Please make sure to give “.txt” extension in filename and put the file name in double quotes. Input File Name for this part should be the same as Output File Name in previous part. Minimum length of each fragment should be less than maximum length of each fragment. Maximum length of each fragment should be less than sequence length in Part1

* To assemble the fragments of sequences in a ﬁle into one long sequence, (Part 3 of assignment):

java MergeFragments <inputFileName> <matchScore > <replace Penalty> <delete Penalty> <outputFileName>

example: java MergeFragments “fragments.txt” 1 -1 -3 “result.txt”

Note: Please make sure to give “.txt” extension in filename and put the file name in double quotes. Input File Name for this part should be the same as Output File Name in previous part.