**JAVA CODES:**

**Algorithm Specific metadata Extraction and Synopsis generation:**

**Requirements**

Code is written in Java using Eclipse IDE.

**Running Code Classes in algorithm\_flow.2017-01-17 project:**

**PDF to Text Conversion:**

Run TextExtractor.java in PdfSegmentation Package

**Data Preprocessing for LSTM Model:**

Run Remove\_HeaderAndReferences.java in AlgorithmExtraction Package.

Set training and testing data for LSTM:

Run PreProcessing.java in AlgorithmExtraction Package.

**Synopsis Generation:**

Run AlgorithmExtractor.java in AlgorithmExtraction Package.

Run synopsisGeneration.java in AlgorithmExtraction Package.

**Data Preprocessing for SVM:**

Run dataforSVM.java in AlgorithmExtraction Package.

**Rule Based Method:**

Run RuleBased\_Keywords.java in AlgorithmExtraction Package.

Run RuleBasedKeywords\_Annotation.java in AlgorithmExtraction Package.

Run Precison\_Recall\_Calculation.java in AlgorithmExtraction Package.

**Results ranking using Lucene:**

**Running Code Classes in LuceneDemo Project:**

Run IndexFiles.java

Run SearchFiles.java

**PYTHON CODES:**

**Bi-Directional LSTM Model:**

**Requirements**

Code is written in python Keras and requires Tensor flow as well.

**Running the models (CPU)**

For Training:

Python B\_LSTM.py

**SVM Model:**

**Running the models:**

python svm.py

**Generate Synopsis using Rake Model:**

**Running the models:**

python rake.py