PROJECT REPORT

1. Summary:

The project is done in Java using Eclipse environment. The filename is passed as command line argument.

2. Execution instructions:

Compilation:

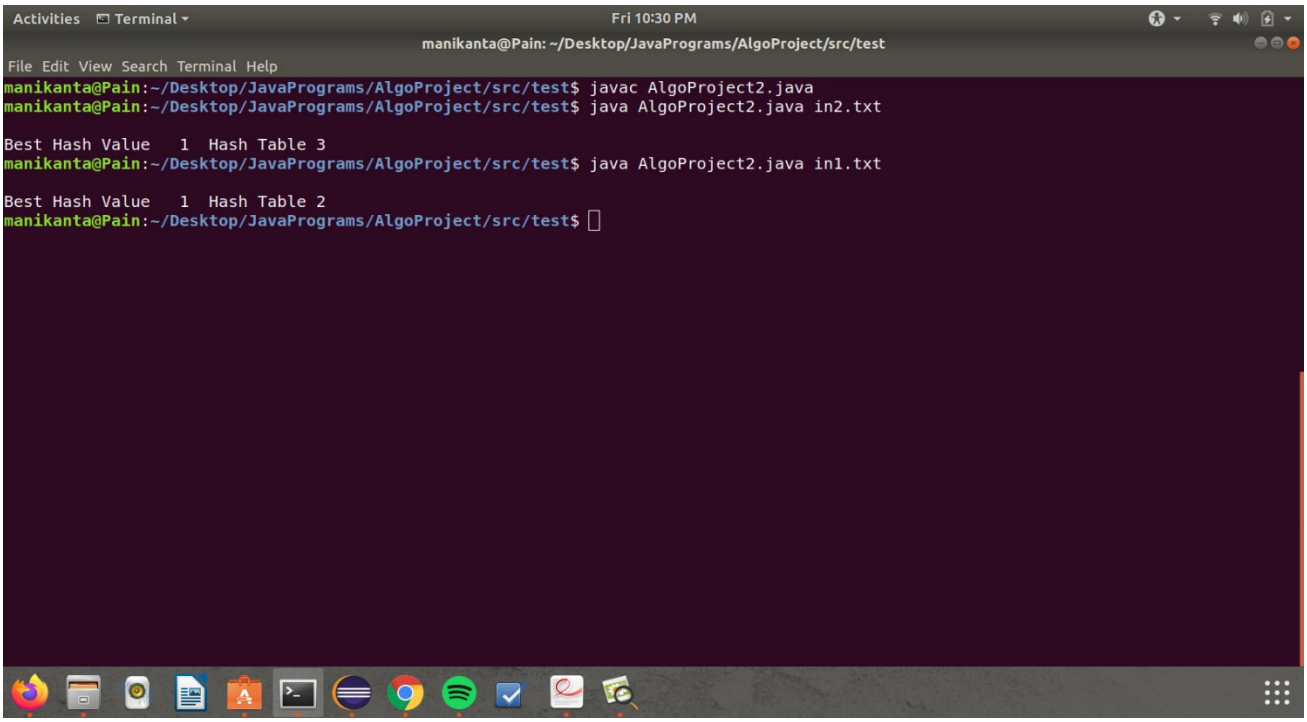
- javac AlgoProject2.java

Execution:

- java AlgoProject2.java in1.txt

3. Screenshots:

Best Hash Table number is displayed



4. Pseudocode:

- The file path is taken as command line argument.
- BufferedReader is used to read the content of the files.
- The barcodes are extracted from the file and stored in 2-D array.
- The 2-D array is passed as an argument to the fun() function.
- Seven Hash Tables are created and initialized.
- Based on the digits in the barcode, they are stored in the respective Hash Tables.
- A new 2-D array is created to count the frequencies of the barcode in the Hash Table.
- Then maximum and minimum values of each Hash Table are created and the value of the best Hash Table is stored in the bestsofar variable.

Time complexity: The time complexity of this project is $O(n^2)$.