```java
package TrendTracker;
import java.util.*;
import java.io.*;

public class trendtracker {

        // For the mandatory running times below:
        // n is the number of hashtags in the Trendtracker.


        // A simple class representing a hashtag and
        // the number of times it has been tweeted.
        private class Entry
        {
                public
                        String hashtag;
                        int pop;

                Entry(String ht, int p){

                        hashtag = ht;
                        p = pop;
                }
        }

        // Stores entries sorted (lexicographically) by hashtag.
        private ArrayList<Entry> E;

        // Stores indices of the (up to) three most-tweeted
        // entries in E.
        private ArrayList<Integer> S;


        // Creates a Trendtracker containing hashtags,
        // found in the provided file.
        // The file is promised to have the following format:
        //
        // string1
        // string2
        // ...
        // stringN
        //
        // where string1 < string2 < ... < stringN
        //
        // Must run in O(n) time.
        trendtracker(String fpath) {

        }


        // Return the number of hashtags in the Trendtracker.
        //
        // Must run in O(1) time.
        int size()
        {

        }

        // Returns the index of E containing an Entry with hashtag=ht.
        // If no such hashtag is found, returns -1.
        //
        // Should run in O(log(n)).
        int search (String ht)
        {
```

```
        }

        // Adds 1 to the total number times a hashtag has been tweeted.
        // If the hashtag does not exist in TrendTracker, does nothing.
        //
        // Must run in O(log(n)) time.
        void tweeted(String ht)
        {

        }

        // Returns the number of times a hashtag has been tweeted.
        // If the hashtag does not exist in Trendtracker, returns -1.
        //
        // Must run in O(log(n)) time.
        int popularity(String ht)
        {

        }

        // Returns a most-tweeted hashtag.
        // If the Trendtracker has no hashtags, returns "".
        //
        // Must run in O(1) time.
        String top_trend()
        {

        }

        // Fills the provided list with the 3 most-tweeted hashtags,
        // in order from most-tweeted to least-tweeted.
        //
        // If there are fewer than 3 hashtags, then the arraylist is filled
        // with all hashtags (in most-tweeted to least-tweeted order).
        //
        // Must run in O(1) time.
        void top_three_trends(ArrayList<String> T)
        {

        }

}
```