Design a class named Document to read and store the content of a text file and the following functionalities to be implemented as member methods – count\_words() – to count the total number of words in the file; count\_unique() – to count the number of unique words from the file; most\_freq() to print the most frequent word along with its number of occurrences in the file.

**Code:**

import java.io.BufferedWriter;

import java.io.BufferedReader;

import java.io.FileWriter;

import java.io.File;

import java.io.FileReader;

import java.io.InputStreamReader;

import java.util.StringTokenizer;

class Document

{

String text;

String word="java";

public void output(String s)

{

try{

FileWriter fw=new FileWriter("File.txt",true);

BufferedWriter bw=new BufferedWriter(fw);

bw.write(s);

bw.close();

}

catch(Exception e)

{

System.out.println("exception");

}

}

public void input()

{

try{

FileReader fr=new FileReader("File.txt");

BufferedReader br = new BufferedReader(fr);

StringBuilder sb = new StringBuilder();

String line= br.readLine();

while (line != null)

{

sb.append(line);

line = br.readLine();

}

text = sb.toString();

}

catch(Exception e)

{

System.out.println("exception");

}

}

public int find\_number\_of\_word()

{

int count=0;

StringTokenizer st = new StringTokenizer(text," ");

count=st.countTokens();

return (count);

}

public int find\_number\_of\_unique\_word()

{

int count=0;

int frequency=0;

StringTokenizer str = new StringTokenizer(text," ");

while (str.hasMoreTokens())

{

String s=(str.nextToken()).toString();

StringTokenizer st = new StringTokenizer(text," ");

while (st.hasMoreTokens())

{

String s2=(st.nextToken()).toString();

if(s2.equals(s))

{

frequency++;

}

}

if (frequency<2)

{

count++;

}

frequency=0;

}

return count;

}

public String most\_frequent\_words()

{

int count=0;

int frequency=0;

int most\_frequent=1;

String most\_frequent\_word="No frequent words";

StringTokenizer str = new StringTokenizer(text," ");

while (str.hasMoreTokens())

{

String s=(str.nextToken()).toString();

StringTokenizer st = new StringTokenizer(text," ");

while (st.hasMoreTokens())

{

String s2=(st.nextToken()).toString();

if(s2.equals(s))

{

frequency++;

}

}

if(frequency>most\_frequent)

{

most\_frequent\_word=s;

most\_frequent=frequency;

}

frequency=0;

}

return most\_frequent\_word;

}

}

class File2

{

public static void main(String args[])

{

Document x=new Document();

x.input();

int y=x.find\_number\_of\_unique\_word();

int a=x.find\_number\_of\_word();

System.out.println("Total number of words is " +a);

System.out.println("Total number of unique words is "+y);

String s=x.most\_frequent\_words();

System.out.println("Most frequent word is "+s);

x.output(" hii hello ");

}

}

// text in file:-His name is Sanket and Sanket belongs to India.

**Output:**

