Execution.java

import java.util.Scanner;

public class Execution {

public static void main(String[] args){

Scanner sc=new Scanner(System.in);

String ogString, revString, lowerOgString;

System.out.println("Enter a string");

ogString=sc.nextLine();

Reverse r=new Reverse();

revString=r.getReverse(ogString);

System.out.println("Reverse is "+revString);

Words w=new Words();

int numWords=w.countWords(ogString);

System.out.println("Number of words are "+numWords);

lowerOgString=ogString.toLowerCase();

Vowels v=new Vowels();

int numVowels=v.countVowels(lowerOgString);

System.out.println("Number of vowels are "+numVowels);

}

}

Reverse.java

public class Reverse {

String reverse="";

public String getReverse(String ogString){

for(int i = ogString.length() - 1; i >= 0; i--)

{

reverse = reverse + ogString.charAt(i);

}

return reverse;

}

}

Words.java

public class Words {

static int countWords(String ogString)

{

int state = 0;

int wc = 0;

int i = 0;

while (i < ogString.length())

{

if (ogString.charAt(i) == ' ' || ogString.charAt(i) == '\n'

|| ogString.charAt(i) == '\t')

state = 0;

else if (state == 0)

{

state = 1;

++wc;

}

++i;

}

return wc;

}

}

Vowels.java

public class Vowels {

int count=0;

public int countVowels(String lowerOgString){

for(int i = lowerOgString.length() - 1; i >= 0; i--){

if(lowerOgString.charAt(i)=='a'|| lowerOgString.charAt(i)=='e'|| lowerOgString.charAt(i)=='i'|| lowerOgString.charAt(i)=='o'|| lowerOgString.charAt(i)=='u'){

count=count+1;

}

}

return count;

}

}