

```

1 // Program of a typing test to find speed in WPM, CPM, accuracy % based on commonly typed words in English 1k.
2
3 import java.time.LocalDateTime;
4 import java.util.Scanner;
5
6 public class typingTest {
7     static String input;
8     static int WPM, CPM, numberOfWords, correctWords;
9     static double start, end, time, accuracy, minutesTaken;
10    // Class Variables
11    String[] bank = {"be", "have", "do", "say", "get", "make", "go", "know", "take",
12                    "see", "come", "think", "look", "want", "give", "use", "find", "tell",
13                    "ask", "work", "seem", "feel", "try", "leave", "call", "person", "life",
14                    "day", "number", "again"};
15
16    typingTest() {
17        input = "";
18        WPM = CPM = numberOfWords = correctWords = 0;
19        start = end = time = accuracy = minutesTaken = 0.0;
20    }
21
22    public static void main(String[] args) {
23        typingTest obj = new typingTest();
24        obj.countdown();
25        obj.input();
26        obj.calculate();
27        obj.display();
28    }
29
30    void countdown() {
31        try {
32            System.out.println("3!");
33            Thread.sleep(1000);
34            System.out.println("2!");
35            Thread.sleep(1000);
36            System.out.println("1!");
37            Thread.sleep(1000);
38            System.out.println("Start!\n");
39            // Test words
40            System.out.println("be have do say get make go know take see");
41            System.out.println("come think look want give use fine tell ask work");
42            System.out.println("seem feel try leave call person life day number again\n");
43        } catch (InterruptedException e) {
44            System.out.println("Error!");
45        }
46    }
47
48    void input() {
49        Scanner sc = new Scanner(System.in);
50        start = LocalDateTime.now().toNanoOfDay();
51        input = sc.nextLine();
52        end = LocalDateTime.now().toNanoOfDay();
53        time = (end - start) / 1000000000.0; // Convert nanoseconds to seconds
54        sc.close();
55    }
56
57    void calculate() {
58        numberOfWords = 30;
59        Scanner words = new Scanner(input);
60        int i = 0;
61        while (words.hasNext()) {
62            if (bank[i].equals(words.next()))
63                ++correctWords;
64            ++i;
65        }
66        words.close();
67        minutesTaken = time / 60.0;
68        WPM = (int) ((correctWords * 1.0) / minutesTaken);
69        accuracy = ((correctWords * 1.0) / numberOfWords) * 100.0;
70        accuracy = Math.round(accuracy * 100.0) / 100.0;
71        CPM = (int) ((114.0 * (accuracy / 100.0)) / minutesTaken);
72    }
73
74    void display() {
75        System.out.println("WPM: " + WPM);
76        System.out.println("CPM: " + CPM);
77        System.out.println("Accuracy % : " + accuracy);
78    }
79 }
80 /**

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```
81 * Variable      Data      Table
82 * input         String     Sentence entered by user
83 * bank          String[]   Word bank to be entered
84 * WPM, CPM      int        (words per minute and characters per minute) Store speed of user
85 * numberOfWords int        Store Total number of words
86 * correctWords  int        Number of words correct by user
87 * start, end    int        Store nano seconds of day
88 * time          int        end - start (Store time taken)
89 * minutesTaken  int        Convert time to minutes
90 * accuracy      int        Accuracy in percentage
91 */
```