

### Task 1: Java IO Basics

Write a program that reads a text file and counts the frequency of each word using `FileReader` and `FileWriter`.

```
package test;

import java.io.*;

import java.util.*;

public class WordFrequencyCounter {

    public static void main(String[] args) {

        String inputPath = "input.txt";

        String outputPath = "output.txt";

        try {

            FileReader fr=new FileReader(inputPath);

            BufferedReader br=new BufferedReader(fr);

            Map<String, Integer> wordFrequencyMap=new HashMap<>();

            String line;

            while ((line = br.readLine()) != null) {

                String[] words=line.split("\\s+");

                for (String word:words) {

                    word=word.replaceAll("[^a-zA-Z]", "").toLowerCase();

                    if (!word.isEmpty()) {

                        wordFrequencyMap.put(word, wordFrequencyMap.getOrDefault(word, 0) + 1);

                    }

                }

            }

            br.close();

            fr.close();

            FileWriter fileWriter=new FileWriter(outputPath);

            BufferedWriter bufferedWriter=new BufferedWriter(fileWriter);
```

```
    for (Map.Entry<String, Integer> entry : wordFrequencyMap.entrySet()) {  
        bufferedWriter.write(entry.getKey()+": "+entry.getValue());  
        bufferedWriter.newLine();  
    }  
    bufferedWriter.close();  
    fileWriter.close();  
    System.out.println("Word frequencies written to "+outputPath);  
} catch (IOException e) {  
    e.printStackTrace();  
}  
}  
}
```