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**Assignment:** Write a program in any language that reads and detects misspelt keywords in another program of any language

**Course:** CSC 431

```
import java.io.FileInputStream;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.logging.Level;
import java.util.logging.Logger;
import java.util.*;

public class KeywordChecker {

    private static ArrayList<String> keywords = new ArrayList<>();

    // keywords

    private static String[] keys={"try", "catch", "finally", "throw", "throws","import","for", "if",
    "else","switch", "case", "break"};

    public static void main(String[] args) {

        // TODO code application logic here

        try{

            // read file

            FileInputStream fi=new FileInputStream("C:\\Users\\Koiki
Damilare\\Documents\\NetBeansProjects\\KeywordChecker\\src\\test_prog.java");

            int n=0;
```

```

try {

    // Array list that stores all read characters
    ArrayList<Character> word= new ArrayList();
    // tokens are read character by character
    while((n=fi.read())!=-1){
        char w=(char)n;
        word.add(w); // add character to arraylist
    }

    String newWord="";
    // loop through arraylist
    for(int j=0;j<word.size();j++){
        // If no empty char is encountered yet, append char to String newWord
        if(!" ".equals(String.valueOf(word.get(j)))){
            newWord+=String.valueOf(word.get(j));
        }else if(" ".equals(String.valueOf(word.get(j)))){ // else
            // if token is a keyword print
            if(tokenIsAKeyword(newWord)){
                printToken(newWord);
            }
            // if token is misspelt
            if(isAMispeltToken(newWord)){
                printToken(newWord);
            }
            // empty String newWord

```

```

        newWord="";

        // remove used tokens from arraylist
        for(int k=j;k<=0;k--){
            word.remove(k);
        }
    }

}

} catch (IOException ex) {

    Logger.getLogger(KeywordChecker.class.getName()).log(Level.SEVERE, null, ex);

}

try {

    // close file

    fi.close();

} catch (IOException ex) {

    Logger.getLogger(KeywordChecker.class.getName()).log(Level.SEVERE, null, ex);

}

} catch (FileNotFoundException ex) {

    Logger.getLogger(KeywordChecker.class.getName()).log(Level.SEVERE, null, ex);

}

}

public static boolean tokenIsAKeyword(String token){

    keywords.addAll(Arrays.asList(keys));

    return keywords.contains(token);

}

public static void printToken(String token){

    String[] tokenArray1=token.split(";");

```

```
    for (String tokenArray11 : tokenArray1) {  
        System.out.println(token);  
    }  
}  
  
public static boolean isAMispeltToken(String token){  
    // if token is not in kewords array  
    for(String tk : keywords){  
        // But its spelling matches that of some keywords  
        if(!keywords.contains((token))){  
            return (tk.regionMatches(0, token, 0, token.length()));  
        }  
  
    }  
  
    return false;  
}  
  
}
```