```
package demo;
import java.util.HashMap;
import java.util.Map;
	public class RepeatCount {
		public static void main(String[] args) {
		    String input = "learning java";
		    Map<Character, Integer> charCountMap = countCharacters(input);

		    for (Map.Entry<Character, Integer> entry : charCountMap.entrySet()) {
		        System.out.println(entry.getKey() + "=" + entry.getValue());
		    }
		}

		public static Map<Character, Integer> countCharacters(String input) {
		    input = input.toLowerCase();
		    Map<Character, Integer> charCountMap = new HashMap<>();
```

```
                for (char ch : input.toCharArray()) {
                    if (Character.isLetter(ch)) {
                        charCountMap.put(ch, charCountMap.getOrDefault(ch, 0) + 1);
                    }
                }

                return charCountMap;
            }
        }
```

Output:

```
a=3
r=1
e=1
v=1
g=1
i=1
j=1
l=1
n=2
```

```
package demo;

public class Binary {
```

```
    public static int binarySearch(int[] arr, int target) {
        int left = 0;
        int right = arr.length - 1;

        while (left <= right) {
            int mid = left + (right - left) / 2;

            if (arr[mid] == target) {
                return mid;
            } else if (arr[mid] < target) {
                left = mid + 1;
            } else {
                right = mid - 1;
            }
        }

        return -1;
    }

    public static void main(String[] args) {
        int[] sortedArray = {12, 34, 65, 78, 98, 102, 108,
450, 453};
        int target = 78;
        int index = binarySearch(sortedArray, target);

        if (index != -1) {
            System.out.println("Element " + target + " found
at index " + index);
        } else {
            System.out.println("Element " + target + " not
found in the array.");
        }
    }
```

```
	}
```

Output:

Element 78 found at index 3

```
package file;

import java.io.File;
import java.io.IOException;

public class Io {

	public static void main(String[] args) throws
IOException {
		File file = new
File("C:\\Users\\admin\\Desktop\\folder\\new.doc");
		boolean pp = file.exists();
		System.out.println(pp);
		if(pp==false) {
			file.mkdir();
			pp=file.exists();
			System.out.println(pp);
		}
		File files = new
File("C:\\Users\\admin\\Desktop\\keerathana");
	file.createNewFile();
	File rename = new
File("C:\\Users\\admin\\Desktop\\dharshan");
	boolean sa = files.renameTo(rename);
	System.out.println(sa);
```

```
        File[] s1 = files.listFiles();
        for(File s:s1) {
            if(s.isFile()) {
                String ff =s.getName();
                int last =ff.lastIndexOf(".");
                String ext=ff.substring(last+1);
                if(ext.equals("txt")) {
                    System.out.println(ff);
                }
            }
        }
        rename.delete();
        boolean aa = file.exists();
        System.out.println("file deleted "+ aa);

        }

}
```

Output:

```
true
false
file deleted true
```