

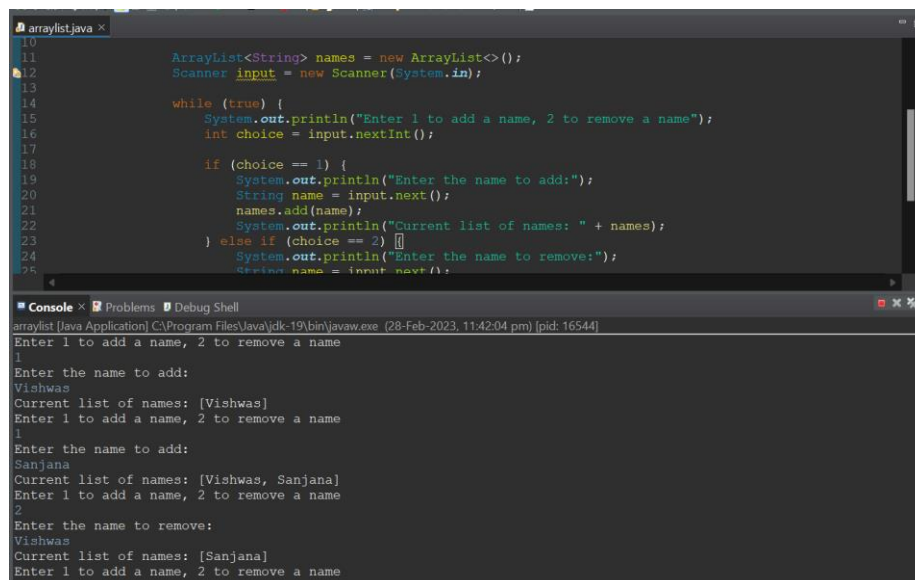
Java Assignment – 6

Vishwas Cp

Tecnotree Mysore

1. Create a program that uses an ArrayList to store a list of names. The program should allow the user to add and remove names from the list, and should display the current list of names after each modification.

<https://codeshare.io/9OLxZ0>



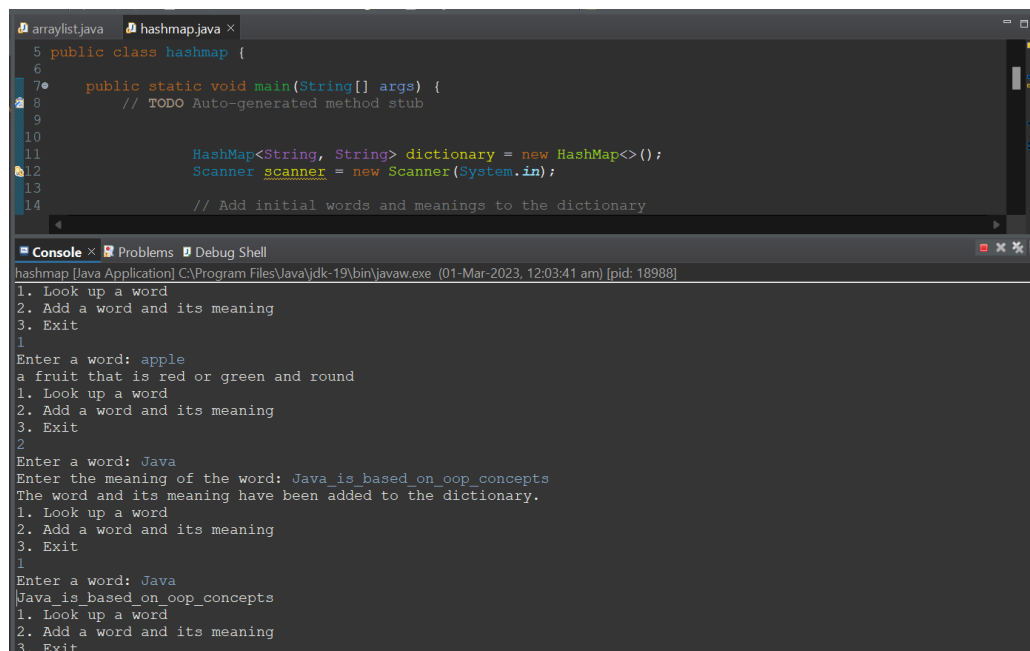
```
10
11     ArrayList<String> names = new ArrayList<>();
12     Scanner input = new Scanner(System.in);
13
14     while (true) {
15         System.out.println("Enter 1 to add a name, 2 to remove a name");
16         int choice = input.nextInt();
17
18         if (choice == 1) {
19             System.out.println("Enter the name to add:");
20             String name = input.next();
21             names.add(name);
22             System.out.println("Current list of names: " + names);
23         } else if (choice == 2) {
24             System.out.println("Enter the name to remove:");
25             String name = input.next();
26
27         }
28     }
```

Console: arraylist [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 11:42:04 pm) [pid: 16544]

```
Enter 1 to add a name, 2 to remove a name
1
Enter the name to add:
Vishwas
Current list of names: [Vishwas]
Enter 1 to add a name, 2 to remove a name
1
Enter the name to add:
Sanjana
Current list of names: [Vishwas, Sanjana]
Enter 1 to add a name, 2 to remove a name
2
Enter the name to remove:
Vishwas
Current list of names: [Sanjana]
Enter 1 to add a name, 2 to remove a name
```

2. Create a program that uses a HashMap to store a dictionary of words and their meanings. The program should allow the user to add new words and meanings, and should display the meaning of a word when the user enters the word.

<https://codeshare.io/MNEznQ>



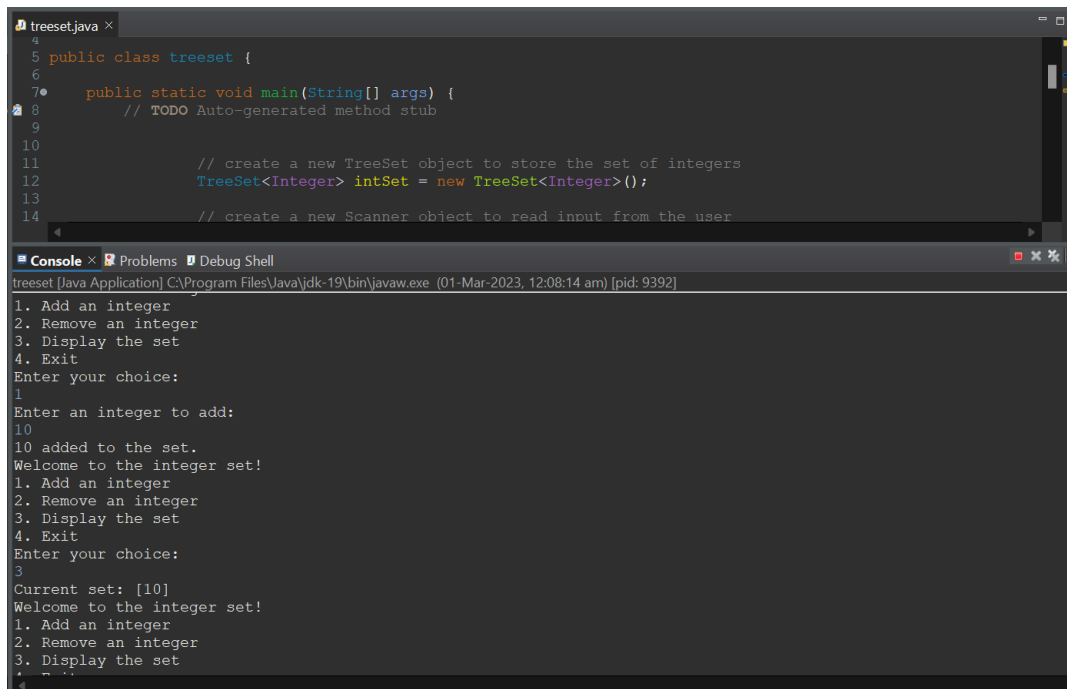
```
5 public class hashmap {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9
10
11         HashMap<String, String> dictionary = new HashMap<>();
12         Scanner scanner = new Scanner(System.in);
13
14         // Add initial words and meanings to the dictionary
15     }
```

Console: hashmap [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (01-Mar-2023, 12:03:41 am) [pid: 18988]

```
1. Look up a word
2. Add a word and its meaning
3. Exit
1
Enter a word: apple
a fruit that is red or green and round
1. Look up a word
2. Add a word and its meaning
3. Exit
2
Enter a word: Java
Enter the meaning of the word: Java is based on oop concepts
The word and its meaning have been added to the dictionary.
1. Look up a word
2. Add a word and its meaning
3. Exit
1
Enter a word: Java
Java is based on oop concepts
1. Look up a word
2. Add a word and its meaning
3. Exit
```

3. Create a program that uses a TreeSet to store a list of integers. The program should allow the user to add and remove integers from the set, and should display the current set of integers after each modification.

<https://codeshare.io/9OLxxX>

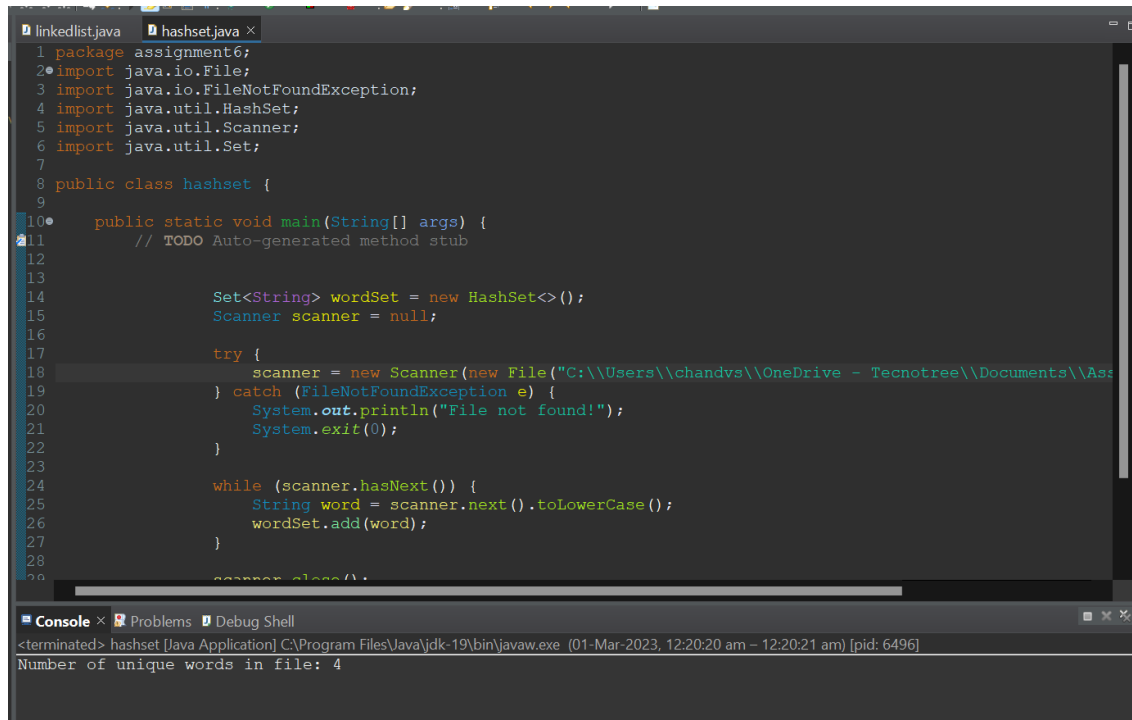


```
treeSet.java x
4
5 public class treeSet {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9
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11         // create a new TreeSet object to store the set of integers
12         TreeSet<Integer> intSet = new TreeSet<Integer>();
13
14         // create a new Scanner object to read input from the user
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```

5. Create a program that uses a HashSet to store a set of strings. The program should read in a text file, and should add each word in the file to the set of strings. After all words have been added, the program should display the number of unique words in the file.

<https://codeshare.io/dwQWyy>



```
1 package assignment6;
2 import java.io.File;
3 import java.io.FileNotFoundException;
4 import java.util.HashSet;
5 import java.util.Scanner;
6 import java.util.Set;
7
8 public class hashset {
9
10     public static void main(String[] args) {
11         // TODO Auto-generated method stub
12
13
14         Set<String> wordSet = new HashSet<>();
15         Scanner scanner = null;
16
17         try {
18             scanner = new Scanner(new File("C:\\Users\\chandvs\\OneDrive - Tecnotree\\Documents\\Ass
19         } catch (FileNotFoundException e) {
20             System.out.println("File not found!");
21             System.exit(0);
22         }
23
24         while (scanner.hasNext()) {
25             String word = scanner.next().toLowerCase();
26             wordSet.add(word);
27         }
28
29         scanner.close();
30     }
31 }
```

Console × Problems × Debug Shell

<terminated> hashset [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (01-Mar-2023, 12:20:20 am – 12:20:21 am) [pid: 6496]

Number of unique words in file: 4