

# Rajalakshmi Engineering College

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## 2024\_28\_III\_OOPS Using Java Lab

### 2028\_REC\_OOPS using Java\_Week 10\_Q2

Attempt : 1  
Total Mark : 10  
Marks Obtained : 10

#### Section 1 : COD

##### 1. Problem Statement

John is organizing a fruit festival, and the quantities of various fruits are stored in a HashMap where fruit names are keys and quantities are values.

Help him develop a program to find the total quantity of fruits for the festival by summing up the values in the HashMap.

##### ***Input Format***

The input consists of fruit quantities in the format 'fruitName:quantity', where fruitName is the name of the fruit(a string), and quantity is a double value representing the quantity.

The input is terminated by entering "done".

##### ***Output Format***

If the value is not numeric, print "Invalid input".

If any special characters other than ':' are entered, print "Invalid format".

Refer to the sample output for formatting specifications.

## Sample Test Case

Input: Banana:15.2

Orange:56.3

Mango:47.3

done

Output: 118.80

**Answer**

```
import java.util.*;
```

```
class Main {
```

```
public static void main(String[] args) {
```

```
Scanner sc = new Scanner(System.in);
```

```
HashMap<String, Double> fruitMap = new HashMap<>();
```

```
double total = 0.0;
```

```
boolean invalidInput = false;
```

```
boolean invalidFormat = false;
```

```
while (true) {
```

```
String line = sc.nextLine();
```

```
if (line.equals("done")) {
```

```
break;
```

}

```
if (!line.contains(":") || line.contains(" ") || line.matches(".*[a-zA-Z0-9:.]*"))
```

{

```
invalidFormat = true;
```

```
break;
```

}

```

String[] parts = line.split(":");
if (parts.length != 2) {
    invalidFormat = true;
    break;
}

String fruit = parts[0];
String quantityStr = parts[1];

try {
    double quantity = Double.parseDouble(quantityStr);
    fruitMap.put(fruit, quantity);
} catch (NumberFormatException e) {
    invalidInput = true;
    break;
}
}

if (invalidFormat) {
    System.out.print("Invalid format");
} else if (invalidInput) {
    System.out.print("Invalid input");
} else {
    for (double qty : fruitMap.values()) {
        total += qty;
    }
    System.out.printf("%.2f", total);
}
}
}

```

**Status :** Correct

**Marks :** 10/10