

## Get Weekly Temperatures

start

### Declarations

```
String userInput;  
double weeklyAverage = 0.0;  
double sum = 0.0;  
int i;  
Boolean dayFound = false;  
  
ArrayList<String> daysOfTheWeek = new ArrayList<String>();  
    daysOfTheWeek.add("Monday");  
    daysOfTheWeek.add("Tuesday");  
    daysOfTheWeek.add("Wednesday");  
    daysOfTheWeek.add("Thursday");  
    daysOfTheWeek.add("Friday");  
    daysOfTheWeek.add("Saturday");  
    daysOfTheWeek.add("Sunday");  
  
ArrayList<Double> dailyTemperatures = new ArrayList<Double>();  
    dailyTemperatures.add(43.75);  
    dailyTemperatures.add(46.12);  
    dailyTemperatures.add(46.87);
```

```
dailyTemperatures.add(44.12);  
dailyTemperatures.add(35.62);  
dailyTemperatures.add(37.62);  
dailyTemperatures.add(45.00);
```

```
for (i = 0; i < dailyTemperatures.size(); ++i) {  
    sum = sum + dailyTemperatures.get(i);  
}  
weeklyAverage = sum / dailyTemperatures.size();
```

output “What day of the week (Monday – Sunday) would you like the temperature for?”

output “If you would like the temperature for every day of the week, enter the word ‘week’.”

output “If you would like to quit the program, enter the word ‘quit’.”

input userInput

```
while (userInput != “quit”){  
    i = 0;  
    dayFound = false;  
    while (dayFound == false){  
        if (userInput != “week”){  
            if (i < 7){  
                if (userInput == daysOfTheWeek.get(i)){  
                    dayFound = true;  
                    output "On ", daysOfTheWeek.get(i), ", the average  
                    temperature was ", dailyTemperatures.get(i), "  
                    degrees Fahrenheit."  
                }  
            }  
            else {
```

```

        ++i;
    }
}
else if (i >= 7){
    dayFound = true;
    output "The day you entered is invalid. Please enter either
    the word 'week' or one of the following days: Monday,
    Tuesday, Wednesday, Thursday, Friday, Saturday,
    Sunday."
}
}
else if (userInput == "week"){
    dayFound = true;
    for (i = 0; i < daysOfTheWeek.size(); ++i) {
        output "On ", daysOfTheWeek.get(i), ", the average
        temperature was ", dailyTemperatures.get(i), " degrees
        Fahrenheit."
    }
    output "The average temperature for the whole week is ",
    weeklyAverage, " degrees."
}
}
output "What would you like the temperature for next? To quit, enter the word
'quit'."
input userInput
}
if (userInput == "quit"){
    System.exit(0);
}
}
stop

```

eclipse-workspace - Get Weekly Temperatures/src/getWeeklyTemps.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer Project Explorer

Calculate Average Withholding  
Capture Grade Statistics Using For-loop  
Car Data and MPG  
Get Weekly Temperatures  
JRE System Library [JavaSE-17]  
src  
(default package)  
getWeeklyTemps.java  
HelloWorld  
Name and Address

getWeeklyTemps.java

```
1 import java.util.ArrayList;
2 import java.util.Scanner;
3
4 public class getWeeklyTemps {
5
6     public static void main(String[] args) {
7         try (Scanner gimme = new Scanner(System.in)) {
8             String userInput;
9             double weeklyAverage = 0.0;
10            double sum = 0.0;
11            int i;
12            boolean dayFound = false;
13
14            ArrayList<String> daysOfTheWeek = new ArrayList<String>();
15            /* below are the days of the week starting with Monday */
16            daysOfTheWeek.add("Monday");
17            daysOfTheWeek.add("Tuesday");
18            daysOfTheWeek.add("Wednesday");
19            daysOfTheWeek.add("Thursday");
20            daysOfTheWeek.add("Friday");
21            daysOfTheWeek.add("Saturday");
22            daysOfTheWeek.add("Sunday");
23
24            ArrayList<Double> dailyTemperatures = new ArrayList<Double>();
25            /* below are the average temperatures for each day of the week starting with Monday's.
26               I used Fort Collins, CO's average daily temperatures from the previous week to fill out the list.
27               All temperatures are in Fahrenheit */
28            dailyTemperatures.add(43.75);
29            dailyTemperatures.add(46.12);
30            dailyTemperatures.add(46.87);
31            dailyTemperatures.add(44.12);
32            dailyTemperatures.add(35.62);
33            dailyTemperatures.add(37.62);
34            dailyTemperatures.add(45.00);
35
36            for (i = 0; i < dailyTemperatures.size(); ++i) {
37                sum = sum + dailyTemperatures.get(i);
38            }
39        }
40    }
41}
```

Outline

getWeeklyTemps  
main(String[]): void

Problems Javadoc Declaration Console

<terminated> getWeeklyTemps [Java Application] C:\Users\Jinyume\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64\_17.0.2.v20220201-1208\jre\bin\javaw.exe (Mar 20, 2022, 7:49:51 PM - 7:50:15 PM)

What day of the week (Monday - Sunday) would you like the temperature for?  
If you would like the temperature for every day of the week, enter the word 'week'.  
If you would like to quit the program, enter the word 'quit'.  
week

On Monday, the average temperature was 43.75 degrees Fahrenheit.  
On Tuesday, the average temperature was 46.12 degrees Fahrenheit.  
On Wednesday, the average temperature was 46.87 degrees Fahrenheit.  
On Thursday, the average temperature was 44.12 degrees Fahrenheit.  
On Friday, the average temperature was 35.62 degrees Fahrenheit.  
On Saturday, the average temperature was 37.62 degrees Fahrenheit.  
On Sunday, the average temperature was 45.0 degrees Fahrenheit.

The average temperature for the whole week is 42.72 degrees.

What would you like temperature for next? To quit, enter the word 'quit'.  
quit  
|