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| Test Case: | Input: | Expected Output: | Actual Output: | Result: |
| 1. 4 Cool days, 2 warm days, 4 hot days | 23, 19, 16, 13, 15, 20, 26, 29,  28, 31 | The Temperature, in C, for the next 10 days is: [23, 19, 16, 13, 15, 20, 26, 29, 28, 31]  The Temperature, in F, for the next 10 days is: [73.4, 66.2, 60.8, 55.400000000000006, 59.0, 68.0, 78.80000000000001, 84.2, 82.4, 87.80000000000001]  There will be 4 cool days in this time period.  There will be 2 warm days in this time period.  There will be 4 hot days in this time period. | The Temperature, in C, for the next 10 days is: [23, 19, 16, 13, 15, 20, 26, 29, 28, 31]  The Temperature, in F, for the next 10 days is: [73.4, 66.2, 60.8, 55.400000000000006, 59.0, 68.0, 78.80000000000001, 84.2, 82.4, 87.80000000000001]  There will be 4 cool days in this time period.  There will be 2 warm days in this time period.  There will be 4 hot days in this time period. | Passed |
| 1. 5 Cool days, 3 warm days, 2 hot days. | 23, 19, 16, 13, 15, 16, 20, 21, 26, 31 | The Temperature, in C, for the next 10 days is: [23, 19, 16, 13, 15, 16, 20, 21, 26, 31]  The Temperature, in F, for the next 10 days is: [73.4, 66.2, 60.8, 55.400000000000006, 59.0, 60.8, 68.0, 69.80000000000001, 78.80000000000001, 87.80000000000001]  There will be 5 cool days in this time period.  There will be 3 warm days in this time period.  There will be 2 hot days in this time period. | The Temperature, in C, for the next 10 days is: [23, 19, 16, 13, 15, 16, 20, 21, 26, 31]  The Temperature, in F, for the next 10 days is: [73.4, 66.2, 60.8, 55.400000000000006, 59.0, 60.8, 68.0, 69.80000000000001, 78.80000000000001, 87.80000000000001]  There will be 5 cool days in this time period.  There will be 3 warm days in this time period.  There will be 2 hot days in this time period. | Passed |
| 1. 1 cool day, 5 warm days, 4 hot days | 19, 23, 20, 21, 25, 24, 26, 31, 28, 29 | The Temperature, in C, for the next 10 days is: [19, 23, 20, 21, 25, 24, 26, 31, 28, 29]  The Temperature, in F, for the next 10 days is: [66.2, 73.4, 68.0, 69.80000000000001, 77.0, 75.2, 78.80000000000001, 87.80000000000001, 82.4, 84.2]  There will be 1 cool days in this time period.  There will be 5 warm days in this time period.  There will be 4 hot days in this time period. | The Temperature, in C, for the next 10 days is: [19, 23, 20, 21, 25, 24, 26, 31, 28, 29]  The Temperature, in F, for the next 10 days is: [66.2, 73.4, 68.0, 69.80000000000001, 77.0, 75.2, 78.80000000000001, 87.80000000000001, 82.4, 84.2]  There will be 1 cool days in this time period.  There will be 5 warm days in this time period.  There will be 4 hot days in this time period. | Passed |

Written Report:

To test my program, I created 3 test cases. All three varied depending on the number of cool, warm, and hot days they had. All 3 test cases passed the trials.

For the first test case, I entered 4 cool day temperatures, 2 warm day temperatures, and 4 hot day temperatures into the program. Specifically, the numbers were 23, 19, 16, 13, 15, 20, 26, 29, 28, 31. The program perfectly outputted the array of all temperatures in Celsius, an array of all temperatures converted to Fahrenheit, as well as displayed the correct number of cool, warm, and hot days in the end print statement. Therefore, the test case effectively passed.

The second test case involved 5 cool days, 3 warm days and 2 hot days. The numbers input were 23, 19, 16, 13, 15, 16, 20, 21, 26, 31. The program exhibited absolutely normal behavior, effectively and accurately displaying the original array, converting the temperatures to Fahrenheit, and correctly displaying each number of days, thus passing the second test case.

The final test case has an input of 1 cool day, 5 warm days, and 4 hot days. Using the numbers 19, 23, 20, 21, 25 24, 26, 31, 28, 29. Once again, all digits were calculated, converted, and displayed correctly, with 3rd test case passing effectively.