

SE 1105 PROGRAMMING AND PROBLEM SOLVING I

Week 7

Task: Temperature Statistics

Implement a C program to track the temperature for 7 days and provide basic statistic functions.

Instructions:

1. The program starts with an array named **temperatures** to store the temperature data for 7 days.
2. Write a **calculateAverageTemperature** function that calculates the average temperature for the 7 days. Use a loop to sum up the temperatures and then calculate and return the average.
3. Write a **findHottestAndColdestTemperatures** function to find and print the hottest and coldest temperatures for the 7 days. Use a loop and conditional statements to compare temperatures and store the hottest and coldest values.
4. Write a **addTemperature** function to add a temperature value to the **temperatures** array at a specific index.
5. In the **main** function:
 - Initialize the **temperatures** array to store the temperatures for the week.
 - Use a loop to allow the user to input temperatures for each day of the week.
 - Calculate and display the average temperature for the week using the **calculateAverageTemperature** function.
 - Find and print the hottest and coldest temperatures for the week using the **findHottestAndColdestTemperatures** funct