COP1334C
Introduction to C++ Programming

Chapter 7
Arrays
Lab

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1. **Number Analysis Program** **(25 pts)**

Write a program that asks the user for a file name. Assume the file contains a series of numbers, each written on a separate line. The program should read the contents of the file into an array and then display the following data:

- **The lowest number in the array.**
- **The highest number in the array.**
- **The average of the numbers in the array.**

Note: Download and use the sample file numbers.txt for testing.

numArray.cpp

2. **Chips and Salsa** **(25 pts)**

Write a program that lets a maker or chips and salsa keep track of sales for five different types of salsa: mild, medium, sweet, hot, and zesty.
The program should use two parallel 5-element arrays: an array of strings that holds the five salsa names and an array of integers that holds the number of jars sold during the past month for each salsa type.
The salsa names should be stored using an initialization list at the time the array is created. The program should prompt the user to enter the number of jars sold for each type. Once this sales data has been entered, the program should produce a report that displays for each salsa type, total sales, and the names of the highest selling and lowest selling products.

Input Validation: Do not accept negative values for number of jars sold.

chips.cpp

3. Monkey Business (50 pts)

A local zoo wants to keep track of how many pounds of food each of its three monkeys eats each day during a typical week. Write a program that stores this information in a two-dimensional 3 x 5 array, where each row represents a different monkey and each column represents a different day of the week.

The program should first have the user input the data for each monkey. Then it should create a report that includes the following information:

- **Average amount of food eaten per day by the whole family of monkeys.**
- **Least amount of food eaten during the week by any one monkey.**
- **The greatest amount of food eaten during the week by any one monkey.**

Input Validation: Do not accept negative numbers for pounds of food eaten.

monkey.cpp