

BCS 230 Lab8

CRN 23798, 23322, 20108 Spring 2015

Instructor: Dr. Jie Li

Objective: To learn to use dynamic variables to manipulate data.

Task:

Write a program that performs the following tasks.

- 1) Declare an `int` pointer variable `ptr`. Create a dynamic `int` variable and store its address in `ptr`. Store integer 10 in the dynamic variable. Output the address and the value of `ptr`, and the value pointed to by `ptr`.
- 2) Double the value stored in the above dynamic variable. Output the new value.
- 3) Declare an `int` pointer variable `numPtr`. Ask the user to enter an integer as the size of a dynamic array. Create a dynamic `int` array of that size and store its base address in `numPtr`.
- 4) Input data into the dynamic array from the standard input device.
- 5) Write a function `printArray` to output the contents of an array. Call `printArray` function to output the above dynamic array.
- 6) Ask user to enter an integer and append it to the end of the dynamic array. Output the new array.
- 7) Destroy dynamic variables when they are no longer needed.