Lab 10

Pointers & Arrays

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Lab objectives

After completing this lab, the students should be able to

- Pass and return arrays/pointer to functions
- Understand the difference between pointers and arrays

Task: 01

Write a program to pass an integer array of 10 elements to a function which returns the
same array after sorting it in descending order. Print the array.

Task: 02

Write a program that performs the following functions:

1: write a function, **generateArray,** that creates an **array** (on the heap using **malloc/new** operator) and return it to the main program. Print the array returned.

2: Pass the returned array in step1 to another function that resizes it and return the resized array back to the main function. Print the resized array.

Task: 03

From Task02 use function, **generateArray**, to generate an integer array and return it to the main program.

Pass the returned array to another function, ask user to enter **search key**. Scan passed array to the function for the key, if the key is found display index of the value found and the value itself in the main program.

Hint: use pointers values for match in the main program.