

1. Write a program that declares three one-dimensional arrays named **miles, gallons, and mpg**. Each array should be capable of holding **10 elements**. In the miles array, store the numbers 240.5, 300.0, 189.6, 310.6, 280.7, 216.9, 199.4, 160.3, 177.4, and 192.3. In the gallons array, store the numbers 10.3, 15.6, 8.7, 14, 16.3, 15.7, 14.9, 10.7, 8.3, and 8.4. Each element of the mpg array should be calculated as the corresponding element of the miles array divided by the equivalent element of the gallons array: for example, $\text{mpg}[0] = \text{miles}[0] / \text{gallons}[0]$. Use pointers when calculating and displaying the elements of the mpg array.

2. Use Pointers to write a function to bubble sort an integer array.

Input format.

Specifies the length of the sequence and enters the sequence.

Output format.

Output in order from smallest to largest.

input.

8
3 5 2 8 2 9 5 1

output.

1 2 2 3 5 5 8 9

3. Write the string concatenation function mystreat. Its prototype is `char *streat (char *strDest, const char *strSrc)`, where strDest is the destination string and strSrc is the source string.

Input format.

The string length should not exceed 100.

Output format.

Output the concatenated string.

Input:

Hello
World

Output:

Result is:Hello World

4. Enter 10 numbers(int) from the keyboard and find the difference between their maximum and minimum values (using a pointer)

Input format.

Enter 10 integers

Output format.

the difference between their maximum and minimum values

input:

4 8 2 23 32 13 42 66 24 10

output:

The difference between the maximum and the minimum is 64

5. Define an array of 10 pointers to double-precision numbers. Then read 10 numbers into the locations referenced by the pointers. Next, have your program sum the numbers and store the result in a pointer-accessed location. Finally, have your program display the contents of all locations, again using pointer notation.