

Ahsanullah University of Science and Technology, Bangladesh

CSE 1102: Elementary Structured Programming Lab (Fall 24)

Pointer Practice Problems

SL	Problem statement	
1	Write a C program to find the sum of two numbers using pointers.	
2	Write a program to input 5 integers into an array and use a pointer to display them.	
3	Write a program to count how many positive and negative numbers or odd and even numbers are in an array using pointer traversal.	
4	Write a program that calculates the sum of all elements in an array using a pointer.	
5	Write a program to reverse an array using pointers (do not use indexing like arr[i]). (Same problem for string)	
6	Write a C program to copy elements of one array into another using pointers. (Same problem for string)	
7	Write a program to find the largest and smallest element in an array using pointers.	
8	Write a C program to concatenate two strings using pointers.	
9	Write a program to count vowels and consonants in a string using a pointer.	
10	Write a program to check whether a string is a palindrome using pointers.	
	N.B The above practice problems can also be used for functions (pass by reference). A few example problems of functions using pass by reference are given below.	
11	Write a function that takes a pointer to an integer and increments its value by 10. Test it in main().	
12	Write a program where a function receives two pointers to integers and returns their product.	
13	Write a function that swaps two numbers using call by reference (pointer parameters).	
14	Write a function that takes an array and its size as arguments (using pointers) and returns the average of the elements.	
15	Write a function that reverses a string in place using pointers (pass string as parameter).	
16	Write a function that counts the digits of the number and reverses the number using pass by reference.	