Practical 6

#include <stdio.h>

int main() {

int size;

printf("Enter the size of the arrays: ");

scanf("%d", &size);

int array1[size], array2[size], scalar\_sum = 0;

int vector\_sum[size];

// Input values for array1

printf("Enter values for Array 1:\n");

for (int i = 0; i < size; i++) {

scanf("%d", &array1[i]);

}

// Input values for array2

printf("Enter values for Array 2:\n");

for (int i = 0; i < size; i++) {

scanf("%d", &array2[i]);

}

// Calculate scalar sum

for (int i = 0; i < size; i++) {

scalar\_sum += array1[i];

}

// Calculate vector sum and store in vector\_sum array

for (int i = 0; i < size; i++) {

vector\_sum[i] = array1[i] + array2[i];

}

// Display scalar sum

printf("Scalar Sum: %d\n", scalar\_sum);

// Display vector sum

printf("Vector Sum (Array 1 + Array 2):\n");

for (int i = 0; i < size; i++) {

printf("%d ", vector\_sum[i]);

}

return 0;

}