**Tutorial 06**



#include <stdio.h>

int main () {

    int size;

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

    scanf("%d", &size);

    printf("\n");

    int arr1[size];

    int arr2[size];

    int result[size];

    int scalar\_products;

    printf("Enter the values for array 01:\n");

    for (int i = 0; i < size; i++) {

        printf("Enter value for array 01 [%d]: ", i);

        scanf("%d", &arr1[i]);

    }

    printf("\n");

    printf("Enter the values for array 02:\n");

    for (int i = 0; i < size; i++) {

        printf("Enter value for array 02 [%d]: ", i);

        scanf("%d", &arr2[i]);

    }

    printf("\n");

    printf("Vector Product\n");

    for (int i = 0; i < size; i++) {

        result[i] = arr1[i] \* arr2[i];

        printf("Array 01 [%d] \* Array 02 [%d] = %d\n", i, i, result [i]);

    }

    printf("\n");

    printf("Scalar Product\n");

    for (int i = 0; i < size; i++) {

        result[i] = arr1[i] \* arr2[i];

        scalar\_products += result[i];

    }

    printf("Scalar Product: %d\n", scalar\_products);

    return 0;

}