

Department of Computer Science
CSC215 – Procedural Programming
Lab 4. Functions and arrays

Write and execute the following program:

```
#include <stdio.h>

void merge(int a[], int m, int b[], int n, int c[]) {

    int i, j;
    i = j = 0;

    for (i = 0; i < m ; i++) {
        c[j] = a[i];
        j++;
    }
    for (i = 0; i < n; i++) {
        c[j] = b[i];
        j++;
    }
}

int main() {
    int a[100], b[100], m, n, i, c[200];

    printf("Input number of elements in first array\n");
    scanf("%d", &m);

    printf("Input %d integers\n", m);
    for (i = 0; i < m; i++) {
        scanf("%d", &a[i]);
    }

    printf("Input number of elements in second array\n");
    scanf("%d", &n);

    printf("Input %d integers\n", n);
    for (i = 0; i < n; i++) {
        scanf("%d", &b[i]);
    }

    merge(a, m, b, n, c);
    printf("Result array:\n");
    for (i = 0; i < m + n; i++) {
        printf("%d\n", c[i]);
    }

    return 0;
}
```