# East West University

## Department of Computer science and Engineering

**Course Code:** CSE103- Structured Programming (LAB)

**Section No:** 03

**Lab Assignment:** 01

**Date of submission:** 20-03-2023

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p1.c | p2.c | p3.c | p4.c | p5.c | p6.c | p7.c | p8.c

```c
#include<stdio.h>
int main()
{
    double money;
    double f, discount;
    printf("Enter the amount of money: ");
    scanf("%lf", &money);

    if(money>=1000){
        discount = money * 0.5;
        f = money - discount;
        printf("The discount is: %.2lf\n", discount);
        printf("The final amount is: %.2lf\n", f);
    }
    else if(money>500 && money <1000){
        discount = money * 0.25;
        f = money - discount;
        printf("The discount is: %.2lf\n", discount);
        printf("The final amount is: %.2lf\n", f);
    }
    else if(money <= 500){
        printf("There will be no discount.");
    }
    return 0;
}
```

```
"D:\EWU Books And Files\10th Semester\CSE 103\Lab3\p1.exe"
Enter the amount of money: 600
The discount is: 150.00
The final amount is: 450.00

Process returned 0 (0x0)   execution time : 12.325 s
Press any key to continue.
```

p1.c | p2.c | p3.c | p4.c | p5.c | p6.c | p7.c | p8.c

```c
#include<stdio.h>
int main()
{
    int n, sum=0, i;
    printf("Enter the n: ");
    scanf("%d", &n);

    for(i = 3; i<=3*n; i+=3){
        sum = sum + i;
    }
    printf("%d", sum);
    return 0;
}
```

```
"D:\EWU Books And Files\10th Semester\CSE 103\Lab3\p2.exe"
Enter the n: 4
30
Process returned 0 (0x0)   execution time : 5.595 s
Press any key to continue.
```

here | p1.c | p2.c | p3.c | p4.c | p5.c | p6.c | p7.c | p8.c

```c
#include<stdio.h>
int main()
{
    int n, m=1, i;
    printf("Enter the n: ");
    scanf("%d", &n);

    for(i = 2; i<=2*n; i+=2){
        m = m * i;
    }
    printf("%d", m);
    return 0;
}
```

```
"D:\EWU Books And Files\10th Semester\CSE 103\Lab3\p3.exe"
Enter the n: 4
384
Process returned 0 (0x0)   execution time : 3.180 s
Press any key to continue.
```

p1.c | p2.c | p3.c | **p4.c** | p5.c | p6.c | p7.c | p8.c

```c
#include<stdio.h>
int main()
{
    int a[10], i, sum=0, max = -99999, min = 100000;
    printf("Enter the 10 integers: ");
    for(i=0; i<10; i++){
        scanf("%d", &a[i]);
    }
    for(i=0; i<10; i++){
        sum += a[i];
        if(a[i] > max){
            max = a[i];
        }
        if(a[i] < min){
            min = a[i];
        }
    }
    printf("Sum: %d\n", sum);
    printf("Avg: %d\n", sum/10);
    printf("Max: %d\n", max);
    printf("Min: %d\n", min);
    return 0;
}
```

```
"D:\EWU Books And Files\10th Semester\CSE 103\Lab3\p4.exe"
Enter the 10 integers: 4
52
5
5
5
63
44
4
358
43
Sum: 583
Avg: 58
Max: 358
Min: 4

Process returned 0 (0x0)   execution time : 15.720 s
Press any key to continue.
```

p1.c | p2.c | p3.c | p4.c | **p5.c** | p6.c | p7.c | p8.c

```c
#include<stdio.h>

int main()
{
    int a[10] = {0}, i, sum = 0, max = -99999, min = 100000;
    float avg;

    printf("Enter integers (enter -1 to stop): \n");

    for(i = 0; i < 10; i++)
    {
        scanf("%d", &a[i]);
        if(a[i] == -1){
            break;
        }
        sum += a[i];
        if(a[i] > max){
            max = a[i];
        }
        if(a[i] < min){
            min = a[i];
        }
    }
    avg = (float)sum / i;
    printf("Sum: %d\n", sum);
    printf("Avg: %.2f\n", avg);
    printf("Max: %d\n", max);
    printf("Min: %d\n", min);
    return 0;
}
```

```
"D:\EWU Books And Files\10th Semester\CSE 103\Lab3\p5.exe"
Enter integers (enter -1 to stop):
3
6
4
6
2
9
-1
Sum: 30
Avg: 5.00
Max: 9
Min: 2

Process returned 0 (0x0)   execution time : 10.400 s
Press any key to continue.
```

p1.c | p2.c | p3.c | p4.c | p5.c | **p6.c** | p7.c | p8.c

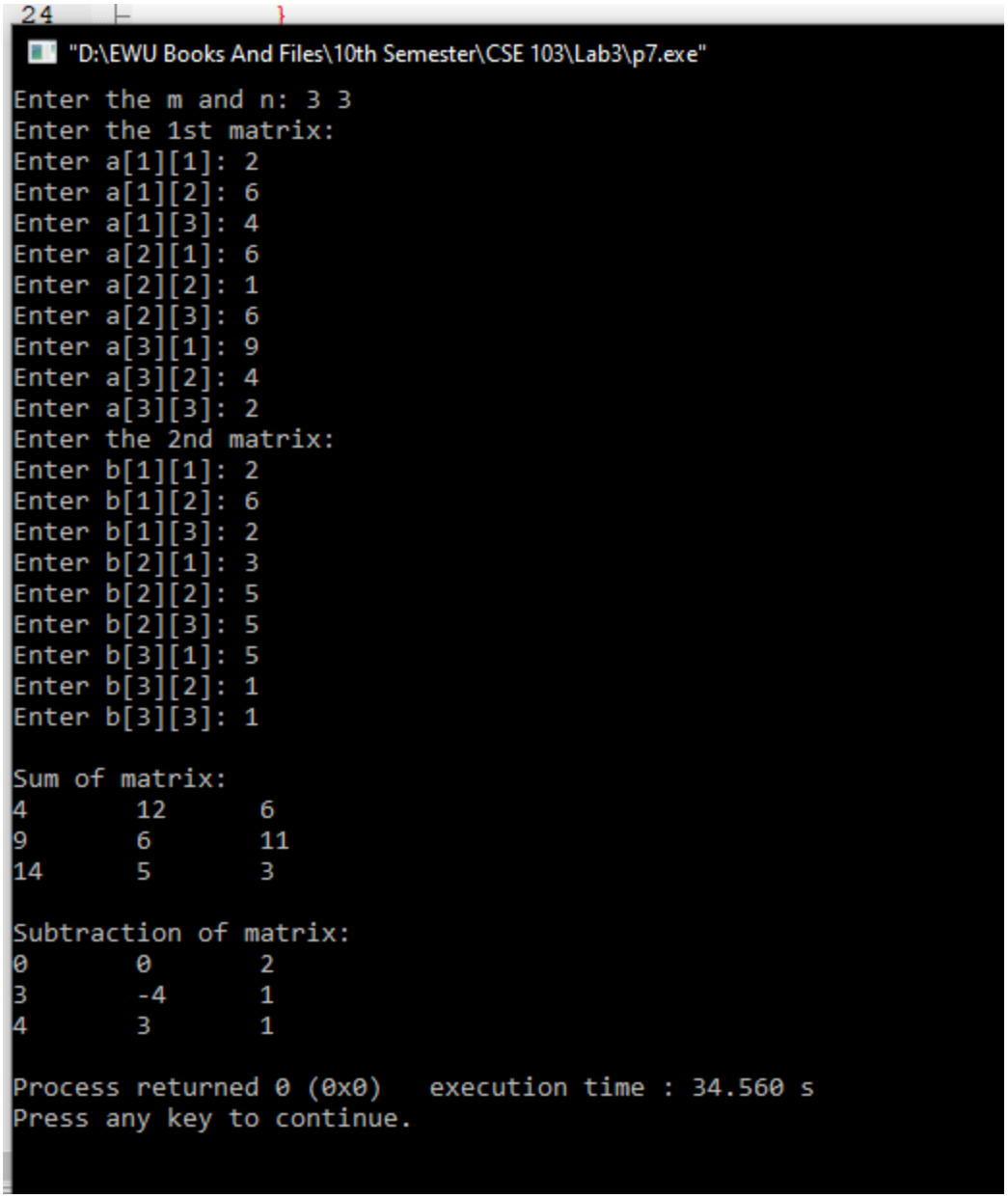
```c
#include<stdio.h>
int main()
{
    int m, n, i, j;
    printf("Enter the m and n: ");
    scanf("%d %d", &m, &n);

    int a[m][n];

    for(i=0; i<m; i++){
        for(j=0; j<n; j++){
            printf("Enter a[%d][%d]: ", i, j);
            scanf("%d", &a[i][j]);
        }
    }


    for(i=0; i<m; i++){
        for(j=0; j<n; j++){
            printf("%d\t",a[j][i]);
        }
        printf("\n");
    }

    return 0;
}
```

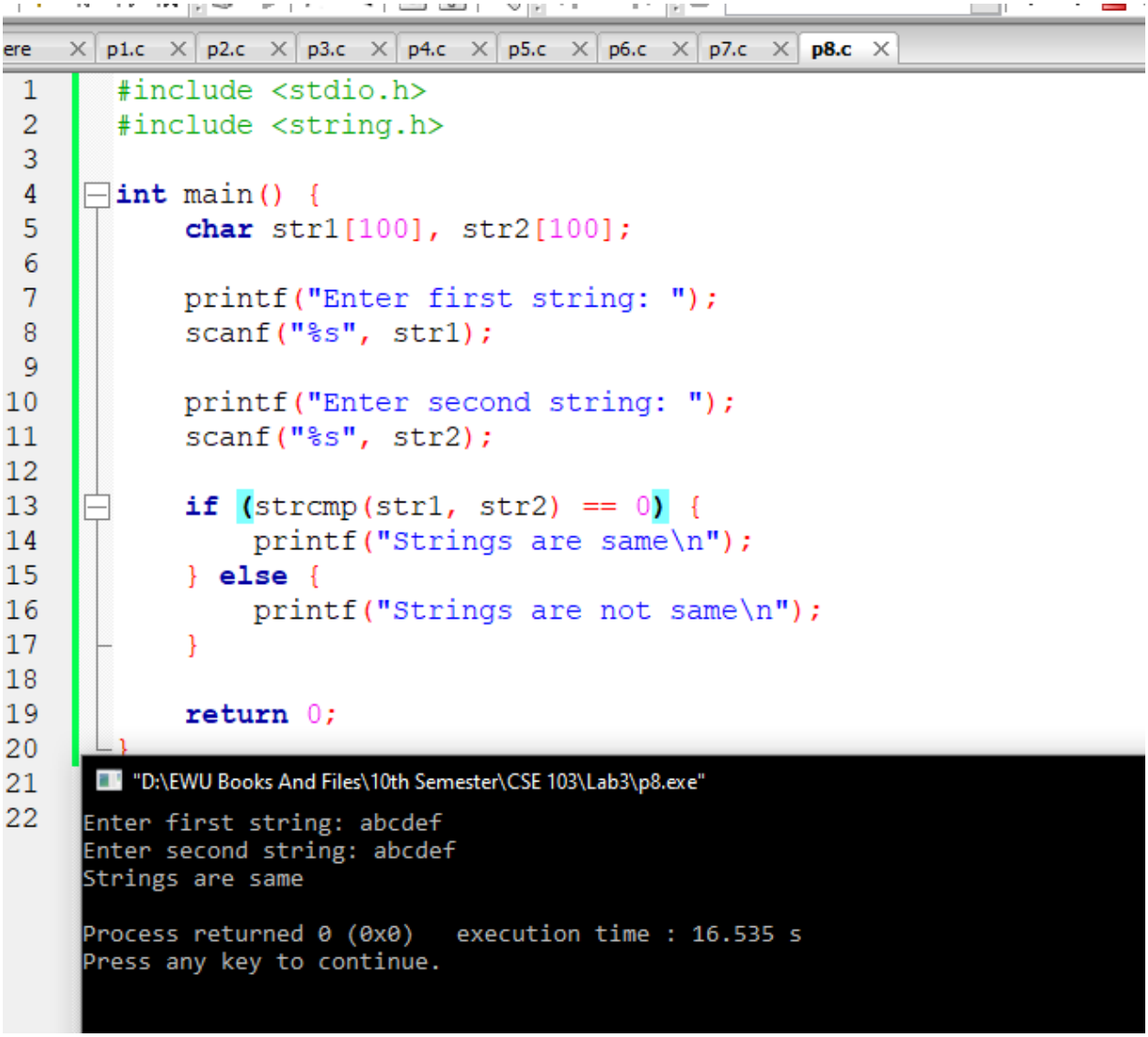
```
"D:\EWU Books And Files\10th Semester\CSE 103\Lab3\p6.exe"
Enter the m and n: 2 2
Enter a[0][0]: 1
Enter a[0][1]: 3
Enter a[1][0]: 6
Enter a[1][1]: 5
1       6
3       5

Process returned 0 (0x0)   execution time : 8.200 s
Press any key to continue.
```

p1.c | p2.c | p3.c | p4.c | p5.c | p6.c | **p7.c** | p8.c

```c
#include<stdio.h>
int main()
{
    int m, n, i, j;
    printf("Enter the m and n: ");
    scanf("%d %d", &m, &n);

    int a[m][n];
    int b[m][n];
    int result[m][n];

    printf("Enter the 1st matrix: \n");
    for(i=0; i<m; i++){
        for(j=0; j<n; j++){
            printf("Enter a[%d][%d]: ", i+1, j+1);
            scanf("%d", &a[i][j]);
        }
    }
    printf("Enter the 2nd matrix: \n");
    for(i=0; i<m; i++){
        for(j=0; j<n; j++){
            printf("Enter b[%d][%d]: ", i+1, j+1);
            scanf("%d", &b[i][j]);
        }
    }
    for(i=0; i<m; i++){
        for(j=0; j<n; j++){
            result[i][j] = a[i][j] + b[i][j];
        }
    }

    printf("\nSum of matrix: \n");
    for(i=0; i<m; i++){
        for(j=0; j<n; j++){
            printf("%d\t",result[i][j]);
        }
        printf("\n");
    }

    for(i=0; i<m; i++){
```

```
        }
        printf("\n");
    }

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

    printf("\nSubtraction of matrix: \n");
    for(i=0; i<m; i++){
        for(j=0; j<n; j++){
            printf("%d\t",result[i][j]);
        }
        printf("\n");
    }

    return 0;
}
```


24 }
"D:\EWU Books And Files\10th Semester\CSE 103\Lab3\p7.exe"
Enter the m and n: 3 3
Enter the 1st matrix:
Enter a[1][1]: 2
Enter a[1][2]: 6
Enter a[1][3]: 4
Enter a[2][1]: 6
Enter a[2][2]: 1
Enter a[2][3]: 6
Enter a[3][1]: 9
Enter a[3][2]: 4
Enter a[3][3]: 2
Enter the 2nd matrix:
Enter b[1][1]: 2
Enter b[1][2]: 6
Enter b[1][3]: 2
Enter b[2][1]: 3
Enter b[2][2]: 5
Enter b[2][3]: 5
Enter b[3][1]: 5
Enter b[3][2]: 1
Enter b[3][3]: 1
Sum of matrix:
4 12 6
9 6 11
14 5 3
Subtraction of matrix:
0 0 2
3 -4 1
4 3 1
Process returned 0 (0x0) execution time : 34.560 s
Press any key to continue.


ere
p1.c
p2.c
p3.c
p4.c
p5.c
p6.c
p7.c
p8.c
#include <stdio.h>
#include <string.h>
int main() {
char str1[100], str2[100];
printf("Enter first string: ");
scanf("%s", str1);
printf("Enter second string: ");
scanf("%s", str2);
if (strcmp(str1, str2) == 0) {
printf("Strings are same\n");
} else {
printf("Strings are not same\n");
}
return 0;
}
"D:\EWU Books And Files\10th Semester\CSE 103\Lab3\p8.exe"
Enter first string: abcdef
Enter second string: abcdef
Strings are same
Process returned 0 (0x0) execution time : 16.535 s
Press any key to continue.