

## Chapters

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## Chapter 9

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Please use this option only if you find any issues or mistakes in the content. If you have any queries or questions regarding the subject matter, then please use [Ask a tutor](#).

You have completed this exercise

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- (1) Writing into a file done
- (2) Reading from a file done
- (3) Handling files done



The files "mata.txt" and "math.txt" contain integer matrices of size 10 x 10. Write a program that calculates the sum of the matrices in a new matrix. The resulting sum matrix shall be saved to the file "sum.usr".

The matrix elements are separated by spaces and newlines. For example:

```
1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
... ..
... ..
91 92 93 94 95 96 97 98 99 100
```

The sum matrix must be saved in the same format. At the end, the program prints a message indicating successful completion.

*Example output:*

The sum of the matrices has been calculated into the file sum.usr.

*The verification of the program output does not account for whitespace characters like "n", "t" and " "*

- [program.c](#)

```
1 #include <stdio.h>
2
3 int main(void)
4 {
5     char *mata_txt = "mata.txt";
6     char *math_txt = "math.txt";
7     char *sum = "sum.usr";
8
9     int i;
10    int j;
11    int mata[10][10];
12    int math[10][10];
13    int summ[10][10];
14
15    /* matrix a */
16    FILE *read1;
17    read1 = fopen("mata.txt", "r");
18
19    if ((read1 = fopen("mata.txt", "r")) == NULL)
20    {
21        printf("Failed to open the file %s\n", mata_txt);
22        return 0;
23    }
24    else
25    {
26        for (i = 0; i < 10; i++)
27        {
28            for (j = 0; j < 10; j++)
29            {
30                if (j == 10)
31                    break;
```

Position: Ln 16 Ch 17

Full screen (Esc to exit)

Reset

Save

Run