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Chapter 8

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- (1) Working hours calculator done
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You have completed this exercise

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The following is the initialisation of a 5 x 5 integer array:

```
int matrix[5][5] =
{
4, 6, 25, 88, 5,
34, 5, 300, 4, 65,
78, 43, 11, 90, 125,
98, 585, 12, 63, 21,
45, 35, 9, 5, 1
};
```

Copy the initialisation into a program that prints the array on the screen and calculates the sum of the elements. Each line shall be followed by a newline character.

Hint:
The program can be implemented using nested for statements. You can use an if statement to check whether a newline is required. The numbers on the lines of the matrix must be separated by single spaces.

Example output:

```
In the array:
4 6 25 88 5
34 5 300 4 65
78 43 11 90 125
98 585 12 63 21
45 35 9 5 1


the sum of the elements is 1757
```

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

- program.c

```c
#include <stdio.h>

int main()
{

    int i;
    int j;
    int sum = 0;

    int matrix[5][5] = { 4, 6, 25, 88, 5,
                         34, 5, 300, 4, 65,
                         78, 43, 11, 90, 125,
                         98, 585, 12, 63, 21,
                         45, 35, 9, 5, 1};

    printf("In the array:\n");
   for(i=0; i<5; i++) {
      for(j=0;j<5;j++) {
         if(j == 4) {
          printf("%d\n", matrix[i][j]);
          }
        else {
        printf("%d ", matrix[i][j]);
          }
      }
   }
```

Position: Ln 1 Ch 1 Full screen (Esc to exit)

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