```c
#include <stdio.h>

void swap(int* a, int* b) {
    int temp = *a;
    *a = *b;
    *b = temp;
}

int partition(int arr[], int low, int high) {
    int pivot = arr[high];
    int i = low - 1;

    for (int j = low; j < high; j++) {
        if (arr[j] <= pivot) {
            i++;
            swap(&arr[i], &arr[j]);
        }
    }
    swap(&arr[i + 1], &arr[high]);
    return (i + 1);
}

void quickSort(int arr[], int low, int high) {
    if (low < high) {
        int pi = partition(arr, low, high);
        quickSort(arr, low, pi - 1);
        quickSort(arr, pi + 1, high);
    }
}

void printArray(int arr[], int size) {
    for (int i = 0; i < size; i++)
        printf("%d ", arr[i]);
    printf("\n");
}

int main() {
    int size;

    printf("Enter the number of elements in the array: ");
    scanf("%d", &size);

    int arr[size];
```

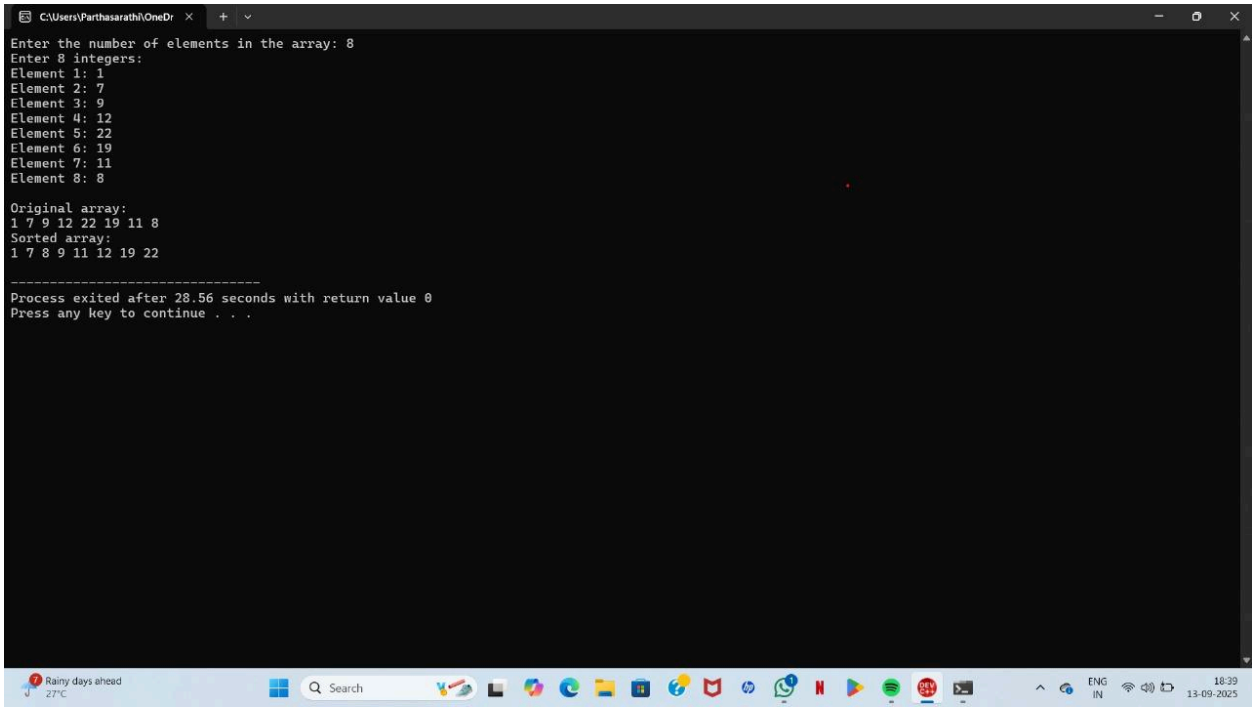
```
    printf("Enter %d integers:\n", size);
    for (int i = 0; i < size; i++) {
        printf("Element %d: ", i + 1);
        scanf("%d", &arr[i]);
    }

    printf("\nOriginal array:\n");
    printArray(arr, size);

    quickSort(arr, 0, size - 1);

    printf("Sorted array:\n");
    printArray(arr, size);

    return 0;
}
```




```
#include <stdio.h>
```

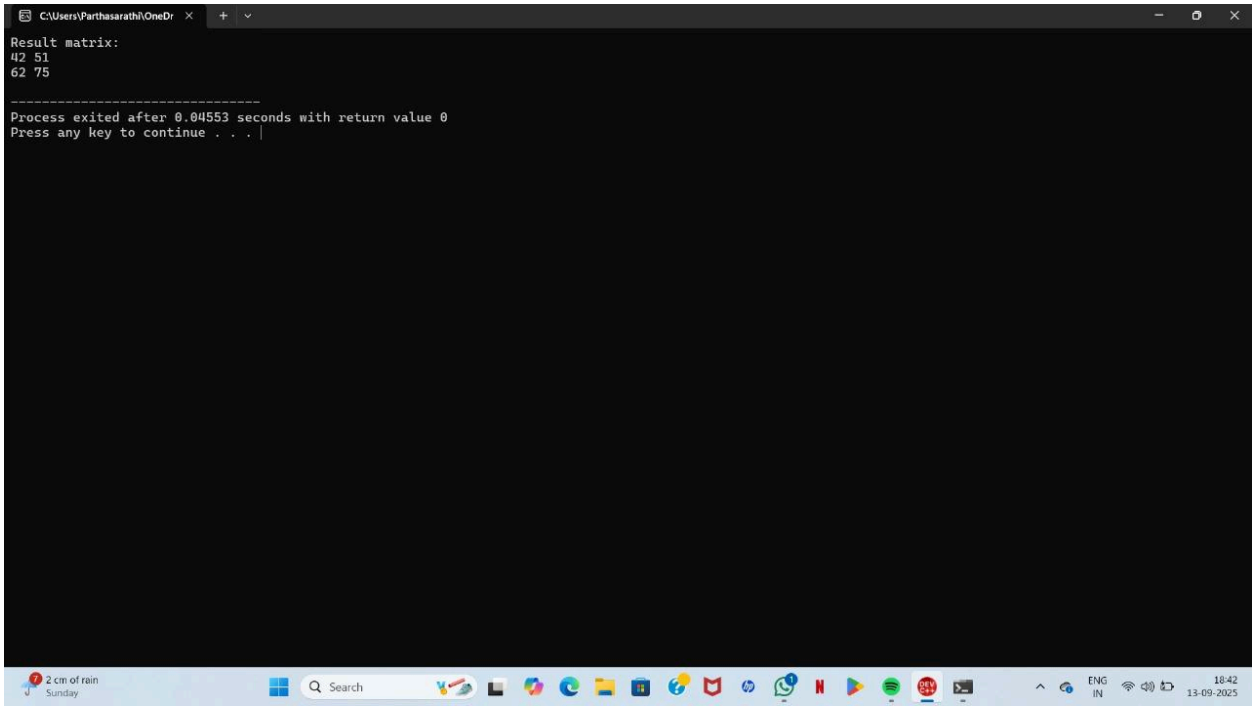
```
void strassen2x2(int A[2][2], int B[2][2], int C[2][2]) {
    int M1 = (A[0][0] + A[1][1]) * (B[0][0] + B[1][1]);
    int M2 = (A[1][0] + A[1][1]) * B[0][0];
    int M3 = A[0][0] * (B[0][1] - B[1][1]);
    int M4 = A[1][1] * (B[1][0] - B[0][0]);
    int M5 = (A[0][0] + A[0][1]) * B[1][1];
    int M6 = (A[1][0] - A[0][0]) * (B[0][0] + B[0][1]);
    int M7 = (A[0][1] - A[1][1]) * (B[1][0] + B[1][1]);

    C[0][0] = M1 + M4 - M5 + M7;
    C[0][1] = M3 + M5;
    C[1][0] = M2 + M4;
    C[1][1] = M1 - M2 + M3 + M6;
}

int main() {
    int A[2][2] = {{4,5}, {6,7}};
    int B[2][2] = {{8,9}, {2,3}};
    int C[2][2];

    strassen2x2(A, B, C);

    printf("Result matrix:\n");
    for (int i = 0; i < 2; i++) {
        for (int j = 0; j < 2; j++)
            printf("%d ", C[i][j]);
        printf("\n");
    }
    return 0;
}
```


C:\Users\Parthasarathi\OneDr
Result matrix:
42 51
62 75

Process exited after 0.04553 seconds with return value 0
Press any key to continue . . .
2 cm of rain
Sunday
Search
ENG
IN
18:42
13-09-2025