#MANDIRA BARVE - TIA03

```
#include <stdio.h>
#include <sys/types.h>
#include <sys/wait.h>
#include <unistd.h>

int main() {
    int status;
    int array[10], n, i, j;
    pid_t pid;

    printf("Enter no. of elements: ");
    scanf("%d", &n);

    printf("Enter elements:\n");
    for (i = 0; i < n; i++) {
        scanf("%d", &array[i]);
    }

    pid = fork();

    if (pid == 0) {
        // Child process
        for (i = 0; i < n; i++) {
            for (j = 0; j < n - i - 1; j++) {
                if (array[j] < array[j + 1]) { // Corrected the comparison condition
                    int temp = array[j];
                    array[j] = array[j + 1];
                    array[j + 1] = temp;
                }
            }
        }

        printf("\nThe sorted array in child process is:\n");
        for (i = 0; i < n; i++) {
            printf("%d ", array[i]);
        }
        printf("\n");
    } else {
        // Parent process
        wait(&status); // Wait for the child process to finish

        printf("\nThe sorted array in parent process is:\n");
        for (i = 0; i < n; i++) {
            printf("%d ", array[i]);
        }
        printf("\n");
    }

    return 0;
}
```

======OUTPUT=======

```
┌──(ghost kali)-[~/OS]
└─$ ./a.out
Enter no. of elements: 5
Enter elements:
10
11
12
54
85

The sorted array in child process is:
85 54 12 11 10

The sorted array in parent process is:
10 11 12 54 85
```