

Program :

```
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <sys/wait.h>
#include <string.h>
#define MAX 20
int a[1000];

void sortArray(int *arr, int n) {
    for (int i = 0; i < n - 1; i++) {
        for (int j = i + 1; j < n; j++) {
            if (arr[i] > arr[j]) {
                int temp = arr[i];
                arr[i] = arr[j];
                arr[j] = temp;
            }
        }
    }
}

int main() {
    int i, n, ele;
    char *str1[MAX];
    char str[5];

    // Accept array size
    printf("Enter the number of elements: ");
    scanf("%d", &n);
    // Accept array elements
    printf("Enter the elements: ");
    for (int i = 0; i < n; i++) {
        scanf("%d", &a[i]);
    }
    pid_t pid = fork();
    if (pid < 0) {
        printf("Error while creating new process....!!!!");
    } else if (pid > 0) {
        // Sort the array
        sortArray(a, n);
        printf("After Sorting");
        for (i = 0; i < n; i++) {
            printf("%d ", a[i]);
        }

        printf("\n");
        for (i = 0; i < MAX; i++) {
            str1[i] = NULL;
        }
        for (i = 0; i < n; i++) {
            sprintf(str, "%d", a[i]);
            str1[i] = strdup(str);
        }
        execve("./child", str1, NULL);
        printf("EXECVE not called... !!");
    }
    return 0;
}
```

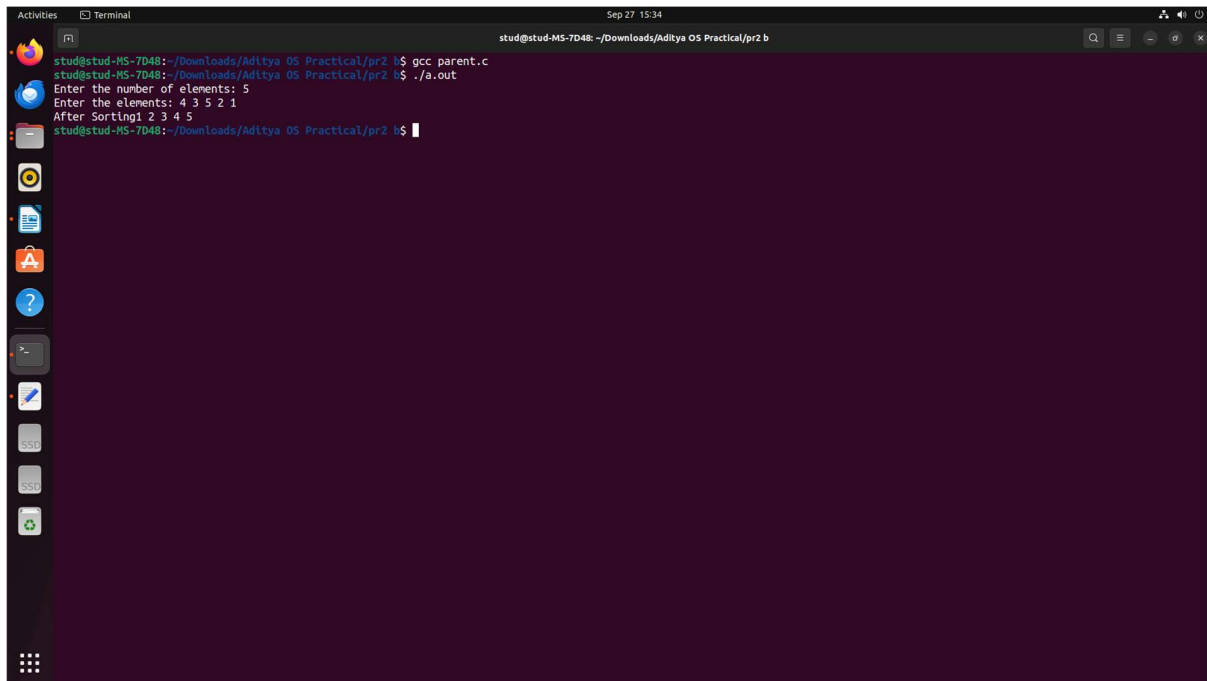
```
}
```

Reverse :

```
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <sys/wait.h>
#include <string.h>
#define MAX 20
int a[1000];
int main(int argc, char *argv[]) {
    int i = 0;
    // Display the array in reverse order
    printf("Array in reverse order: ");
    for (int i = 0; i < argc; i++) {
        a[i] = atoi(argv[i]);
    }

    printf("Reversed Array ... ");
    for(i = argc -1; i >= 0; i--){
        printf("%d ", a[i]);
    }
    printf("\n");
    return 0;
}
```

Output :



```
Activities Terminal Sep 27 15:34
stud@stud-MS-7D48: ~/Downloads/Aditya OS Practical/pr2 b
stud@stud-MS-7D48:~/Downloads/Aditya OS Practical/pr2 $ gcc parent.c
stud@stud-MS-7D48:~/Downloads/Aditya OS Practical/pr2 $ ./a.out
Enter the number of elements: 5
Enter the elements: 4 3 5 2 1
After Sorting 1 2 3 4 5
stud@stud-MS-7D48:~/Downloads/Aditya OS Practical/pr2 $
```