

Function as a Macro Assignments

1. Write a function to sort a given char array as a macro.

user60@trainux01: ~/Batch17OCT2024_175/Assignments/Day07/Function_as_a_Macro_Assignments

```
1 #include <stdio.h>
2 #include <stdlib.h>
3 int compare_chars(const void *a, const void *b) {
4     return (*(char*)a - *(char*)b);
5 }
6 #define SORT_CHAR_ARRAY(arr, size) qsort(arr, size, sizeof(char), compare_chars)
7
8 int main() {
9     char arr[] = {'z', 'd', 'a', 'r', 'e', 'c', 'b'};
10    int size = sizeof(arr) / sizeof(arr[0]);
11    printf("Before sorting: ");
12    for (int i = 0; i < size; i++) {
13        printf("%c ", arr[i]);
14    }
15    printf("\n");
16    SORT_CHAR_ARRAY(arr, size);
17    printf("After sorting: ");
18    for (int i = 0; i < size; i++) {
19        printf("%c ", arr[i]);
20    }
21    printf("\n");
22    return 0;
23 }
24
```

```
user72@trainux01:~/splint$ vi chaip.c
user72@trainux01:~/splint$ gcc chaip.c
user72@trainux01:~/splint$ ./a.out
Before sorting: z d a r e c b
After sorting: a b c d e r z
```