

# CSE107 - Lab10 Task

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Write two C programs that performs the task described below. Name your c files as nameSurnameId\_questionNo.c [ex: basakKarakas1850044026\_1.c and basakKarakas1850044026\_2.c]

Upload your file to your section's submission page on moodle.

## 1 Task

1. Write the reverse\_string() function for the given code below.  
(Hint: use strlen() function which gives the length of a string.)

```
1      #include<stdio.h>
2      #include<string.h>
3
4      void reverse_string(char str[]);
5
6      int main(){
7          char str_arr[100];
8
9          printf("Enter a string:");
10         scanf("%s", str_arr);
11         reverse_string(str_arr);
12         printf("Reversed string is: %s \n", str_arr);
13
14         return 0;
15     }
16
```

2. Write `print_line()`, `print_histogram()` and `len()` functions for the given code below.

**`print_line()`** : Prints `<int num_of_chars>` times `<char c>` character.

**`print_histogram()`** : Prints a histogram of `<int values[]>` with `<char c>` using `print_line()` and `len()` functions.

**`len()`** : Returns the length of `<int array[]>`.

```
1      #include<stdio.h>
2
3      void print_line(char c, int num_of_chars);
4
5      void print_histogram(char c, int vals[]);
6
7      int len(int arr[]);
8
9      int main(){
10         int values[100], val=1, count=0;
11         printf("Enter positive integer(s), to print an
12 histogram.\nEnter a non-positive integer to stop.\n\n");
13         do{
14             printf("Enter a value:");
15             scanf("%d", &val);
16             values[count] = val;
17             count++;
18         }while(val > 0);
19         print_histogram('*', values);
20         return 0;
21     }
```

### Sample:

Enter positive integer(s), to print an histogram.

Enter a non-positive integer to stop.

Enter a value: 3

Enter a value: 5

Enter a value: 6

Enter a value: 2

Enter a value: -1

Output:

```
***
*****
*****
**
```

Good luck :)