

A sample C program. It reads a string of characters and prints its letters in (1) capitalized letters, and (2) in reverse order of the letters.

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

int main() {
    char str[100];
    int i, len;

    printf("Enter a string: ");
    gets(str);

    len = strlen(str);

    for (i = 0; i < len; i++) {
        if (str[i] >= 'a' && str[i] <= 'z') {
            str[i] = str[i] - 'a' + 'A';
        }
    }

    printf("The capitalized string is: %s\n", str);

    // Reverse the string.
    for (i = 0, len = strlen(str); i < len / 2; i++) {
        char temp = str[i];
        str[i] = str[len - 1 - i];
        str[len - 1 - i] = temp;
    }

    printf("The reversed string is: %s\n", str);

    return 0;
}
```

If the program is entered correctly and it compiles, then you may run it (assuming its name is string-pgm) to get an output like this:

```
% string-pgm
Enter a string: Hossein Saiedian
The capitalized string is: HOSSEIN SAIEDIAN
The reversed string is: NAIDEIAS NIESSOH
```