

Program 1: Write a program to input a string and calculate the length of the string without using library functions.

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

```
void main()
```

```
{
```

```
    char string[50];
```

```
    int i, length = 0;
```

```
    printf("Enter a string \n");
```

```
    gets(string);
```

```
    /* keep going through each character of the string till its end */
```

```
    for (i = 0; string[i] != '\0'; i++)
```

```
    {
```

```
        length++;
```

```
    }
```

```
    printf("The length of a string is the number of characters in it \n");
```

```
    printf("So, the length of %s = %d\n", string, length);
```

```
}
```