

The image shows a screenshot of a text editor window titled "Mousepad" with the file path "~/Desktop/BOF.c". The window contains a C program designed to demonstrate a buffer overflow. The code is as follows:

```
1 #include <stdio.h>
2
3 int main () {
4
5     char buffer [10];
6
7     printf ("Inserisci il nome utente: ");
8     scanf ("%s", buffer);
9
10    printf ("Nome utente inserito: %s\n", buffer);
11
12    return 0;
13
14 }
15
```

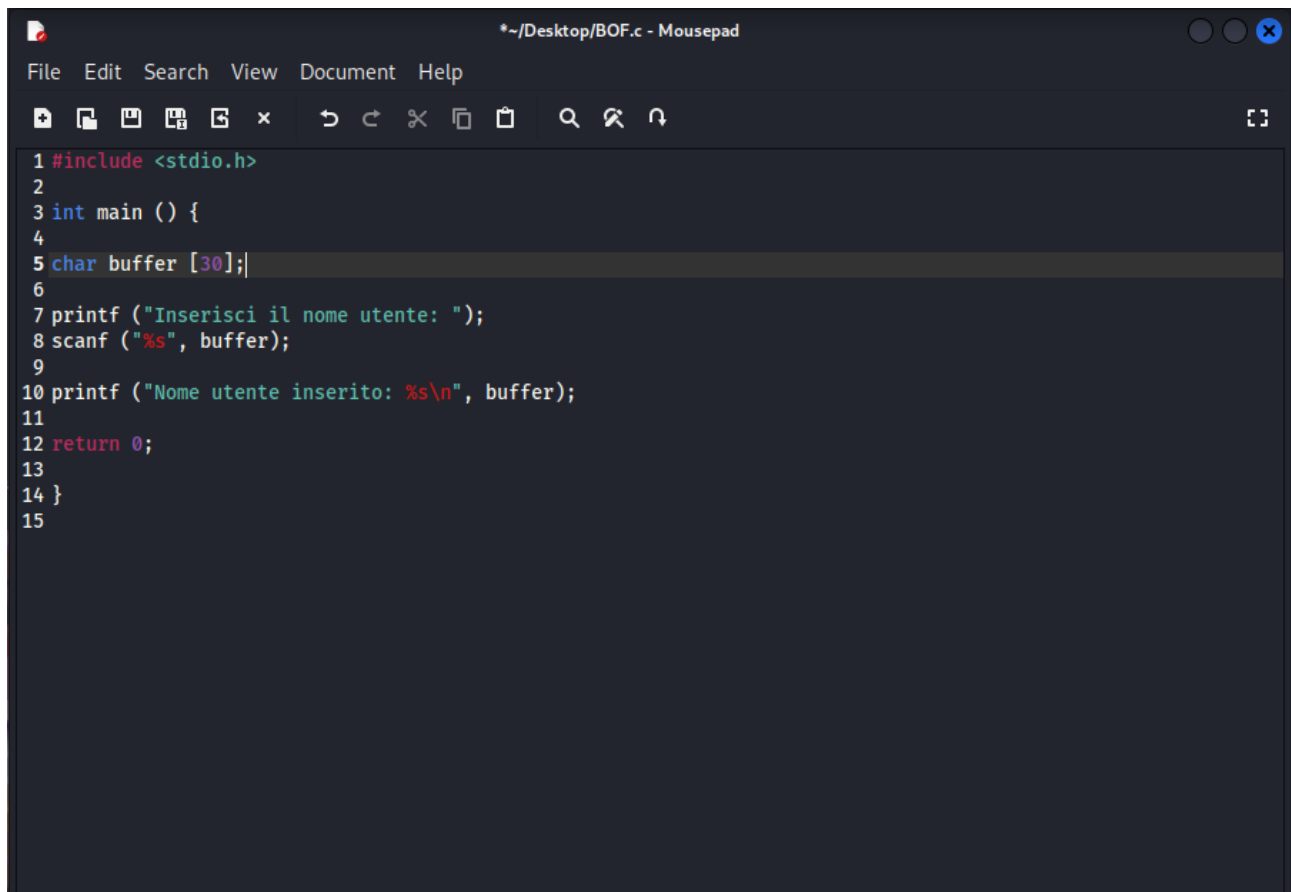
The code defines a character array named 'buffer' of size 10. It prompts the user to enter a name and then prints the entered name. The program is intended to be used to demonstrate a buffer overflow by providing input that exceeds the 10-character limit of the buffer.

```
kali@kali: ~/Desktop
File Actions Edit View Help

(kali@kali)-[~/Desktop]
$ ./BOF
Inserisci il nome utente: epicode
Nome utente inserito: epicode

(kali@kali)-[~/Desktop]
$ ./BOF
Inserisci il nome utente: epicodeilcorsopiùbellodelmondo
Nome utente inserito: epicodeilcorsopiùbellodelmondo
zsh: segmentation fault ./BOF

(kali@kali)-[~/Desktop]
$
```



The image shows a screenshot of a text editor window titled "*~/Desktop/BOF.c - Mousepad". The window has a dark theme and a menu bar with "File", "Edit", "Search", "View", "Document", and "Help". Below the menu bar is a toolbar with icons for file operations (new, open, save, print, close), editing (undo, redo, cut, copy, paste), and search (find, replace, go to line). The main text area contains the following C code:

```
1 #include <stdio.h>
2
3 int main () {
4
5 char buffer [30];|
6
7 printf ("Inserisci il nome utente: ");
8 scanf ("%s", buffer);
9
10 printf ("Nome utente inserito: %s\n", buffer);
11
12 return 0;
13
14 }
15
```

The code is a simple C program that prompts the user to enter a username and then prints it. The buffer is declared as a character array of size 30. The cursor is positioned at the end of the buffer declaration on line 5.

```
kali@kali: ~/Desktop
File Actions Edit View Help

(kali@kali)~[~/Desktop]
$ gcc -g BOF.c -o BOF

(kali@kali)~[~/Desktop]
$ ./BOF
Inserisci il nome utente: lallerolallerolallerolallerolallerolallerolallerolallerolallero
Nome utente inserito: lallerolallerolallerolallerolallerolallerolallerolallerolallero
zsh: segmentation fault ./BOF

(kali@kali)~[~/Desktop]
$
```