

5.- **ft_isprint** . -

Function based on the definition given in the BSD man pages for “isprint”.
The library associated is <ctype.h>.

Sinopsis: int isprint (int c);

Purpose: Checks for a printable character.

Parameters:

- **c:** The character to be checked.

Return value:

- 1 if **C** is a printable character, and 0 otherwise.

Description:

The **ft_isprint** function checks whether the given character is a printable character. A printable character is any character from the set [**32**, **126**]. The function uses a simple comparison to check if the character's ASCII value falls within this range. If the character falls within this range, it returns 1; otherwise, it returns 0.

Code:

```
#include "libft.h"

int    ft_isprint(int c)
{
    return (c >= 32 && c <= 126);
}
/*
int    main(void)
{
    char    c;

    printf("Input a printable character to obtain 1: ");
    scanf("%c", &c);
    printf("%d\n", ft_isprint(c));
    return (0);
}
*/
```

Code explanation:

1. **Include header file:** The **#include "libft.h"** statement includes the header file **libft.h**, which defines the required libraries for our function.
2. **Define function:** The **int ft_isprint(int c)** statement defines the **ft_isprint** function. The function takes one argument, **c**, which is the character to be checked.
3. **Return value:** The **return (c >= 32 && c <= 126);** statement returns 1 if **c** is a printable character, and 0 otherwise. This statement checks if the ASCII value of **c** is between 32 (ASCII value of space character) and 126 (ASCII value of DEL character). If **c** is within this range, the statement returns 1; otherwise, it returns 0.
4. Under comments we develop a main function to show how it works:

4.1. Main function: The `int main(void)` statement defines the main function, which is the entry point of the program. The main function prompts the user to enter a printable character, reads the input character, and prints a message indicating whether the character is printable.

4.2. Input and check printable: The `scanf("%c", &c);` statement reads a character from the user's input and stores it in the variable `c`. The `(ft_isprint(c))` statement checks whether `c` is a printable character. If `c` is a printable character, the statement prints a message indicating that `c` is a printable character (that is 1); otherwise, it prints a message indicating that `c` is not a printable character (that is 0).

4.3. Return value: The `return (0);` statement exits the program with a status code of 0, indicating that the program executed successfully.