

# Header files “stdio.h” and “stdlib.h” in C

## stdio.h

The header file stdio.h stands for Standard Input Output. It has the information related to input/output functions.

Here is the table that displays some of the functions in stdio.h in C language,

Sr.No.	Functions & Description
1	<b>printf()</b> It is used to print the strings, integer, character etc on the output screen.
2	<b>scanf()</b> It reads the character, string, integer etc from the keyboard.
3	<b>getc()</b> It reads the character from the file.
4	<b>putc()</b> It writes the character to the file.
5	<b>fopen()</b> It opens the file and all file handling functions are defined in stdio.h header file.
6	<b>fclose()</b> It closes the opened file.
7	<b>remove()</b> It deletes the file.
8	<b>fflush()</b> It flushes the file.

Here is an example of stdio.h in C language,

## Example

```
#include<stdio.h>

int main () {
    char val;

    printf("Enter the character: \n");
    val = getc(stdin);
    printf("Character entered: ");
    putc(val, stdout);
}
```

Live Demo

```
    return(0);  
}
```

## Output

Here is the output

```
Enter the character: s  
Character entered: s
```

## stdlib.h

The header file `stdlib.h` stands for Standard Library. It has the information of memory allocation/freeing functions.

Here is the table that displays some of the functions in `stdlib.h` in C language,

Sr.No.	Functions & Description
1	<b>malloc()</b> It allocates the memory during execution of program.
2	<b>free()</b> It frees the allocated memory.
3	<b>abort()</b> It terminates the C program.
4	<b>exit()</b> It terminates the program and does not return any value.
5	<b>atol()</b> It converts a string to long int.
6	<b>atoll()</b> It converts a string to long long int.
7	<b>atof()</b> It converts a string to floating point value.
8	<b>rand()</b> It returns a random integer value

Here is an example of `stdlib.h` in C language,

## Example

```
#include <stdio.h>  
#include<stdlib.h>  
  
int main() {
```

Live Demo

```
char str1[20] = "53875";
char str2[20] = "367587938";
char str3[20] = "53875.8843";

long int a = atol(str1);
printf("String to long int : %d\n", a);

long long int b = atoll(str2);
printf("String to long long int : %d\n", b);

double c = atof(str3);
printf("String to long int : %f\n", c);
printf("The first random value : %d\n", rand());
printf("The second random value : %d", rand());

return 0;
}
```

## Output

Here is the output

```
String to long int : 53875
String to long long int : 367587938
String to long int : 53875.884300
The first random value : 1804289383
The second random value : 846930886
```

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