

C Library - <stdarg.h>

The **stdarg.h** header defines a variable type **va_list** and three macros which can be used to get the arguments in a function when the number of arguments are not known i.e. variable number of arguments.

A function of variable arguments is defined with the ellipsis (...) at the end of the parameter list.




Library Variables

Following is the variable type defined in the header stdarg.h –

Sr.No.	Variable & Description
1	va_list This is a type suitable for holding information needed by the three macros va_start() , va_arg() and va_end() .

Library Macros

Following are the macros defined in the header stdarg.h –

Sr.No.	Macro & Description
1	void va_start(va_list ap, last_arg)  This macro initializes ap variable to be used with the va_arg and va_end macros. The last_arg is the last known fixed argument being passed to the function i.e. the argument before the ellipsis.
2	type va_arg(va_list ap, type)  This macro retrieves the next argument in the parameter list of the function with type type .
3	void va_end(va_list ap)  This macro allows a function with variable arguments which used the va_start macro to return. If va_end is not called before returning from the function, the result is undefined.