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.