The wWinMain function is the entry point for a Windows application that uses Unicode. It is the Unicode equivalent of WinMain and is defined as:

int wWinMain(

HINSTANCE hInstance,

HINSTANCE hPrevInstance,

LPWSTR lpszCmdLine,

int nCmdShow

);

**Parameter Breakdown**

1. **HINSTANCE hInstance**
   * This is the handle to the current instance of the application.
   * It is used when loading resources like icons, bitmaps, and menus.
2. **HINSTANCE hPrevInstance** *(Always NULL in modern Windows applications)*
   * This was used in older versions of Windows to determine if another instance of the application was running.
   * It is always NULL since Windows NT-based systems run each application in a separate address space.
3. **LPWSTR lpszCmdLine**
   * This contains the command-line arguments as a Unicode (wchar\_t\*) string.
   * Unlike argv in a console application, this is a single string and needs to be parsed manually.
4. **int nCmdShow**
   * Specifies how the application window should be displayed (minimized, maximized, or normal).
   * Typically, it is passed to ShowWindow() to control the window state.

**Example Usage**

A minimal Windows GUI application using wWinMain:

#include <windows.h>

int APIENTRY wWinMain(HINSTANCE hInstance, HINSTANCE hPrevInstance, LPWSTR lpszCmdLine, int nCmdShow) {

MessageBox(NULL, L"Hello, Windows!", L"Sample", MB\_OK);

return 0;

}

**Key Differences Between WinMain and wWinMain**

| **Function** | **Character Encoding** | **Command-line Argument Type** |
| --- | --- | --- |
| WinMain | ANSI (Multi-Byte) | LPSTR (char\*) |
| wWinMain | Unicode (Wide Char) | LPWSTR (wchar\_t\*) |