

```
#include <GL/gl.h>
#include <GL/glut.h>
```

```
/* For manual pages : sudo apt-get install opengl-4-man-doc
```

```
glClearColor : man 3 glClearColor
```

```
glClearColor - specify clear values for the color buffers
```

```
void glClearColor(GLfloat red, GLfloat green, GLfloat blue, GLfloat alpha);
```

red, green, blue, alpha : Specify the red, green, blue, and alpha values used when the color buffers are cleared. The initial values are all 0

glClearColor specifies the red, green, blue, and alpha values used by glClear() to clear the color buffers

Values specified by glClearColor are clamped to the range 0 1 */

```
/* glClear - clear buffers to preset values
```

```
void glClear(GLbitfield mask);
```

mask : Bitwise OR of masks that indicate the buffers to be cleared

Three masks are GL_COLOR_BUFFER_BIT, GL_DEPTH_BUFFER_BIT, and GL_STENCIL_BUFFER_BIT.

glClear sets the bitplane area of the window to values previously selected by glClearColor, glClearDepth, and glClearStencil

glClear takes a single argument that is the bitwise OR of several values indicating which buffer is to be cleared

The values are as follows:

GL_COLOR_BUFFER_BIT : Indicates the buffers currently enabled for color writing

GL_DEPTH_BUFFER_BIT : Indicates the depth buffer

GL_STENCIL_BUFFER_BIT : Indicates the stencil buffer

The value to which each buffer is cleared depends on the setting of the clear value for that buffer */

```
/* glFlush - force execution of GL commands in finite time
```

```
void glFlush(void);
```

Different GL implementations buffer commands in several different locations, including network buffers and the graphics accelerator itself

glFlush empties all of these buffers, causing all issued commands to be executed as quickly as they are accepted by the actual rendering engine

Though this execution may not be completed in any particular time period, it does complete in finite time

Because any GL program might be executed over a network, or on an accelerator that buffers commands, all programs should call glFlush whenever they count on having all of their previously issued commands completed

For example, call glFlush before waiting for user input that depends on the generated image

glFlush can return at any time, it does not wait until the execution of all previously issued GL commands is complete */

```
void draw( void ) //Drawing function
{
//glClearColor(R,G,B
glClearColor(0,1,0,1); //Background color
glClear(GL_COLOR_BUFFER_BIT );
glFlush(); //Draw order
}

int main(int argc, char **argv) //Main program
{
    glutInit(&argc, argv);
    glutInitDisplayMode(GLUT_SINGLE | GLUT_RGB ); //Simple buffer
    glutInitWindowSize (512, 384);
    glutInitWindowPosition (150, 150);
    glutCreateWindow ("Example OpenGL Window : Green Window");
    glutDisplayFunc(draw); //Call to the drawing function
    glutMainLoop();
    return 0;
}

/* compile as :
gcc -o GreenWindow GreenWindow.c -lglut -lGLU -lGL
or
g++ -o GreenWindow GreenWindow.c -lglut -lGLU -lGL

Run as :
./GreenWindow
*/
```