CG VIVA 1

1. GL/gl.h - refers to a set of utility functions that make some **OpenGL** operations easier to program

GL/glut.h - The **OpenGL** Utility Toolkit (**GLUT**) is a **library** of utilities for **OpenGL** programs, which primarily perform system-level I/O with the host operating system. Functions performed include window definition, window control, and monitoring of keyboard and mouse input.

1. glutInitDisplayMode();

glutInitWindowSize();

glutInitWindowPosition();

glutCreateWindow()

1. Single Buffered Window – When using GL\_SINGLE, you can draw directly to the display

Double Buffered Window – When using GL\_DOUBLE, there are two buffers – one is visible and one is not. We can render the frame to the buffer which is not visible. After rendering is done the buffers are swapped. Now the invisible buffer can be used to be rendered on by another frame.

1. RGBA - The color information at each pixel can be stored either in *RGBA mode*, in which the R, G, B, and possibly A values are kept for each pixel, or in color-index mode, in which a single number (called the color index) is stored for each pixel. Each color index indicates an entry in a table that defines a particular set of R, G, and B values. Such a table is called a *color map*.
2. Datatypes of Open GL – GLint, GLfloat, GLdouble, GLubyte. GLushort, GLuint.