## • Code Flow:

#### drawScene:

The function contains two parts; one part to draw the points and the other to draw the lines.

### Drawing the points:

- 1. Set the point size using the "glPointSize" function to 5.
- 2. Start drawing points using the "glBegin" function with the argument "GL POINTS".
- 3. Iterate over all the points in the "points" vector and uses the "glVertex3f" function to draw each point.
- 4. End drawing points using the "glEnd" function.

### Drawing the lines:

- 1) Start drawing lines using the "glBegin" function with the argument "GL LINES".
- 2) Iterate over all the points in the "points" vector, and for every odd index i, use the "glVertex3f" function to draw a line between the (i-1)th point and the ith point.
- 3) End drawing lines using the "glEnd" function.

# keyInput:

The function handles keyboard input events using a switch statement:

- ✓ If the key is the escape key (ASCII code 27), the function calls the exit function to terminate the program.
- ✓ If the key is the plus sign (+), the function generates a random point and adds it to the points vector and the glutPostRedisplay function is called to request a redraw of the scene.
- ✓ If the key is the minus sign (-), the function removes the last point from the points vector using the pop\_back() function, and again calls glutPostRedisplay to redraw the scene.
- ✓ If the key pressed is not one of the expected keys, the function does nothing and returns.

# • Screenshots:



