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Batch : G-4   Assignment - 12

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- Problem statement :-
  Write a C++ / Java program to simulate any one of following scene. National Flag Hoisting.

- Objective :-
  To understand working of simulating real life scenes using Open GL.

- Outcomes :-
  We will be able to create the animations that simulate National Flag Hoisting.

- S/W & H/W :- Linux 64 bit, Open GL, Qt, creator.

- Theory :-
  - Open Graphics Library is a cross language. Cross-platform application programming interface (API) for rendering 2D & 3D vector graphics.
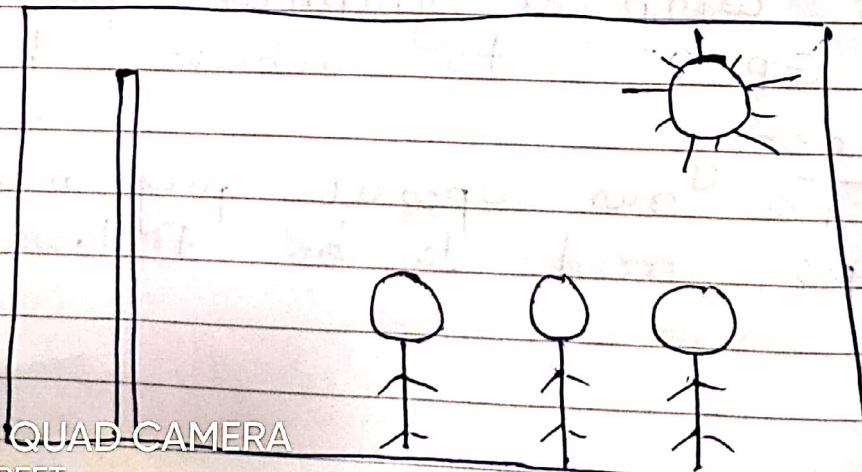 - The API is typically used to interact with a graphics processing with (GPU), to achieve hardware - rendering.
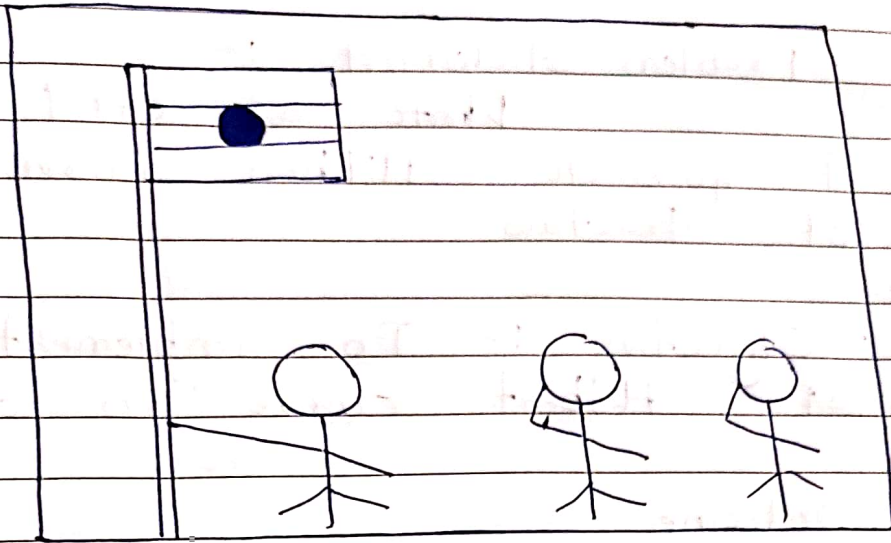 - To run OpenGL program the following steps need to be followed.

- Pseducode :

```
void    Flaghoist ()
{
        glColor 3F( 1, 0.25, .0);
        draw red (-80, -40, 49, 56);
        glColor 3F( 1, 1, 1);
        draw reet (-80, -40, 42, 49);
        glColor 3F( 0, 1, 0);
        draw reet (-80, -40, 35, 42));
        glColor 3F( 0, 0, 1);
        draw Circle (- 60, 45.5, 3.5);
        draw line (-60, +45.5, -56.5, 45.5);
        drrawlne (-60, 45.6, -60, 48.5);
        drawline ( -60, 45.5, -60, 41.5);
        draewline ( -60, 45.5, -63.5, 45.5);
        draulno (-66, 45.5, -58, 47);
        draulne ( -60, 45.5, -6.2, 47);
        draewlon (: -60, 45.6, -58, 42.5)
        draulni (-60, 45.5, -63, 42.5));
}
```

Output :

S key pressed

Test Case Successfull!

- Conclusion :-
  Then we have successfully implemented simulating a national flag hoisting scene using openGL & C++