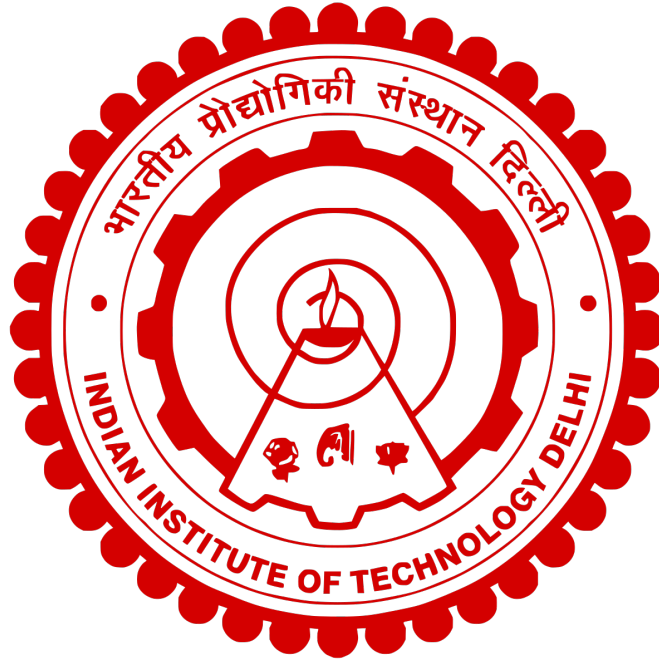


COL781

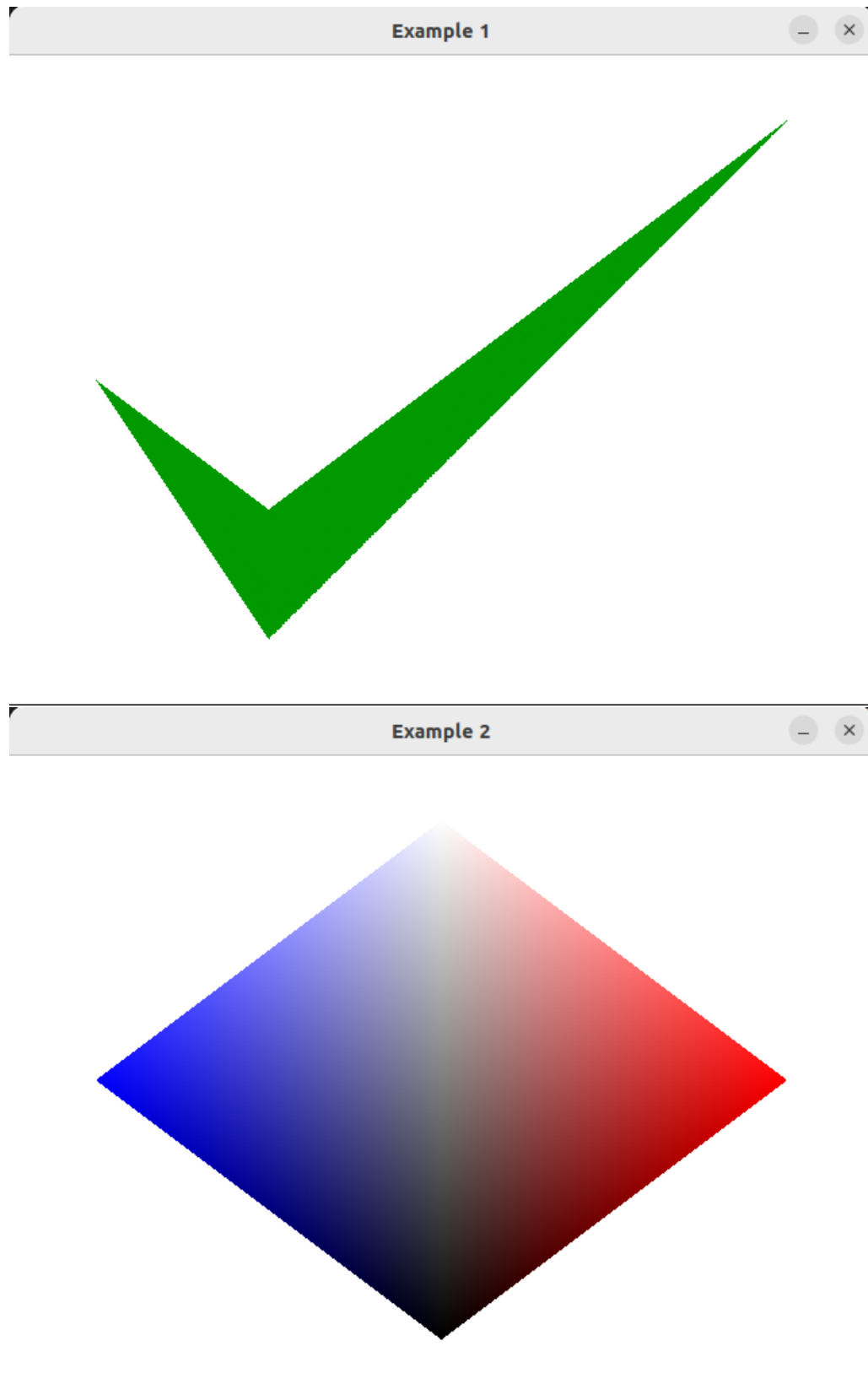
ASSIGNMENT 1

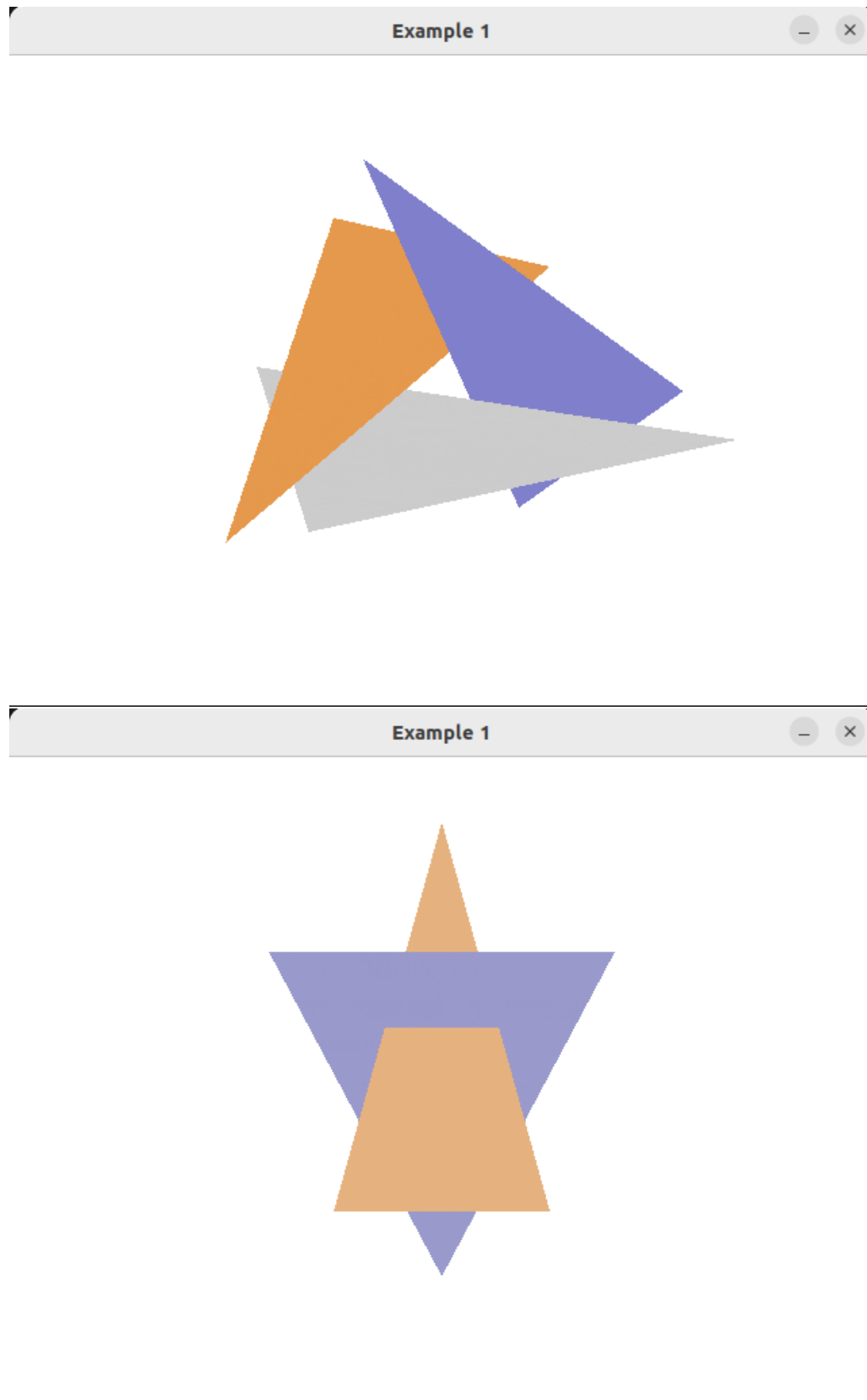
February 6, 2024

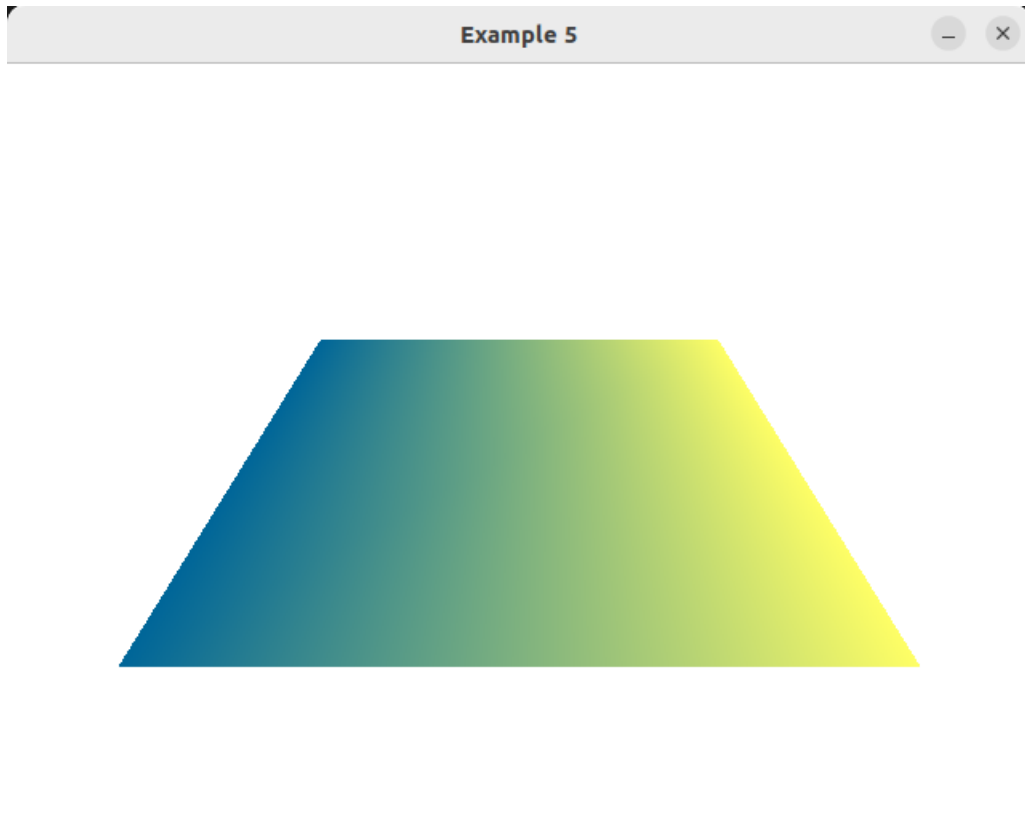


Tanish Singh Tak (2020EE10560)  
Parth Patel (2021CS10550)

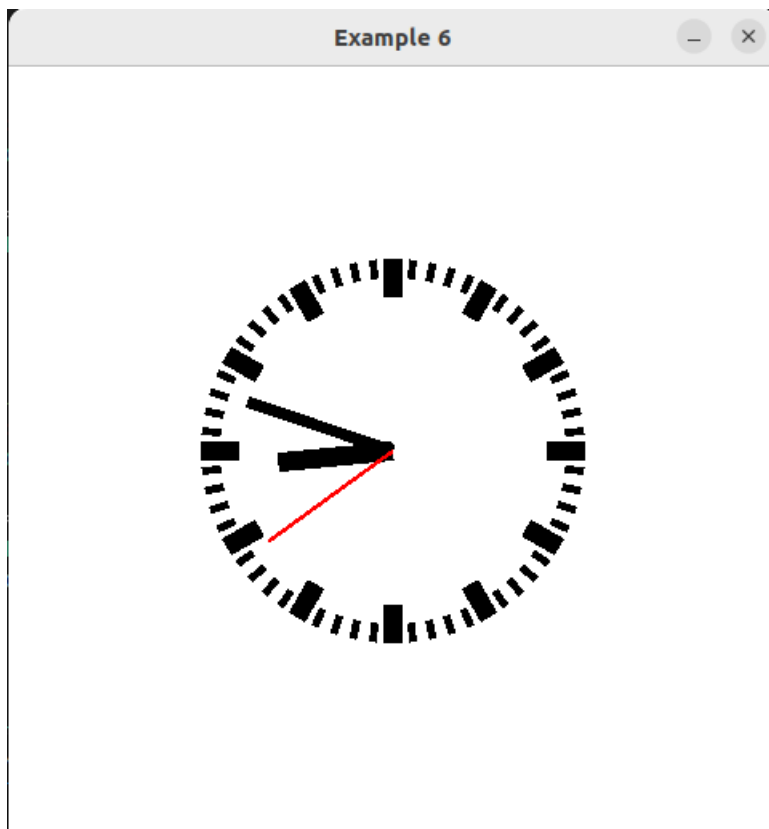
## §1 Example Program SS



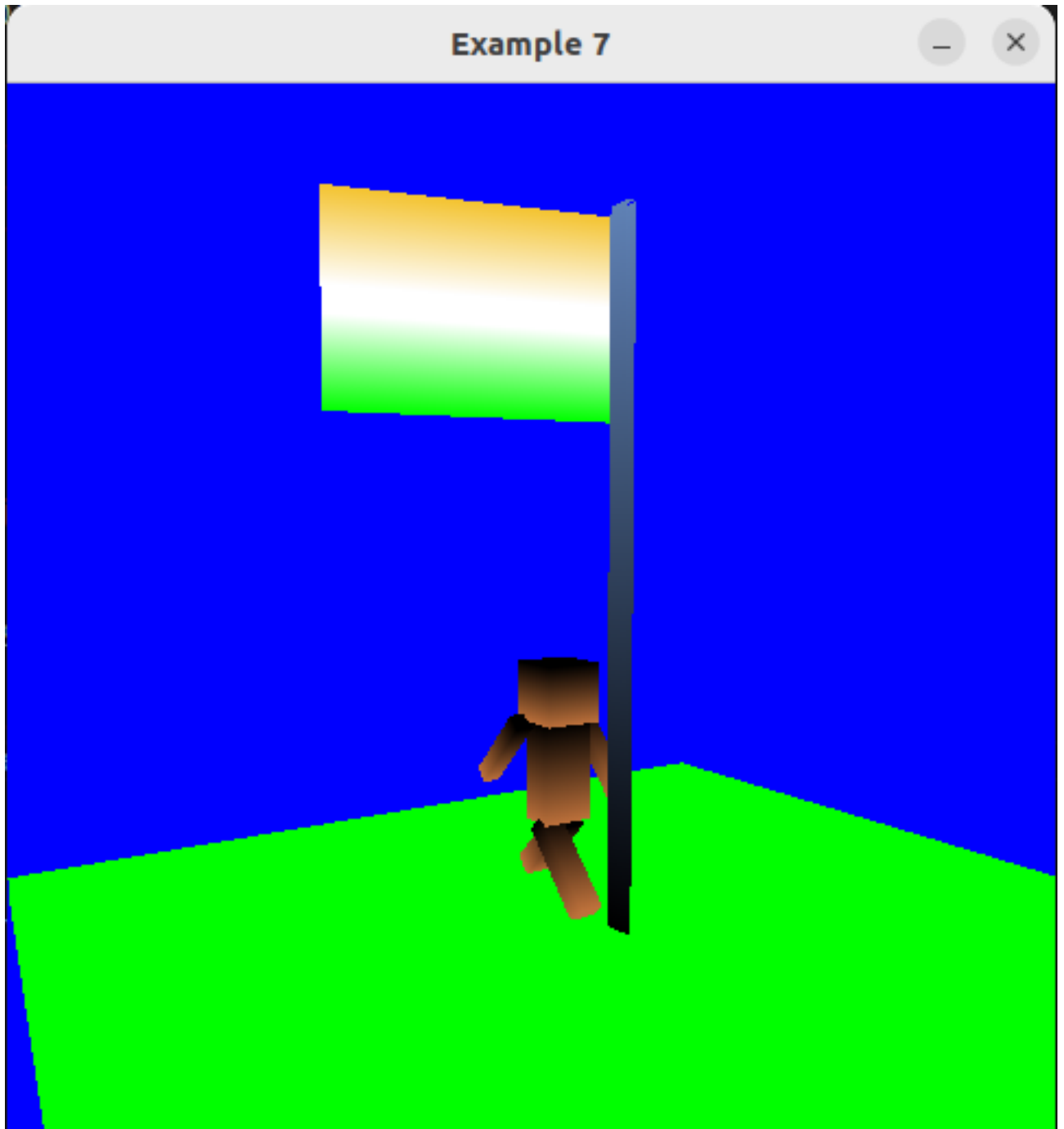




## §2 Clock



### §3 Scene



3D Objects - Hexagonal base pole and a person.

## §4 Highlights

- We modified the rasterizer class as follows -

```
class Rasterizer {  
public:  
#include "api.inc"  
private:  
    SDL_Window *window;  
    SDL_Surface *framebuffer;  
    bool quit;  
    ShaderProgram rasterizerProgram;  
    int supersampling_n;  
    std::vector<std::vector<float>> zbuffer;  
    bool zbuffering;  
};
```

- We implemented all the APIs in `api.inc` file along with a Vertex Shader `vsColorTransform()`
- We added the support for supersampling, depth testing, perspective correct interpolation