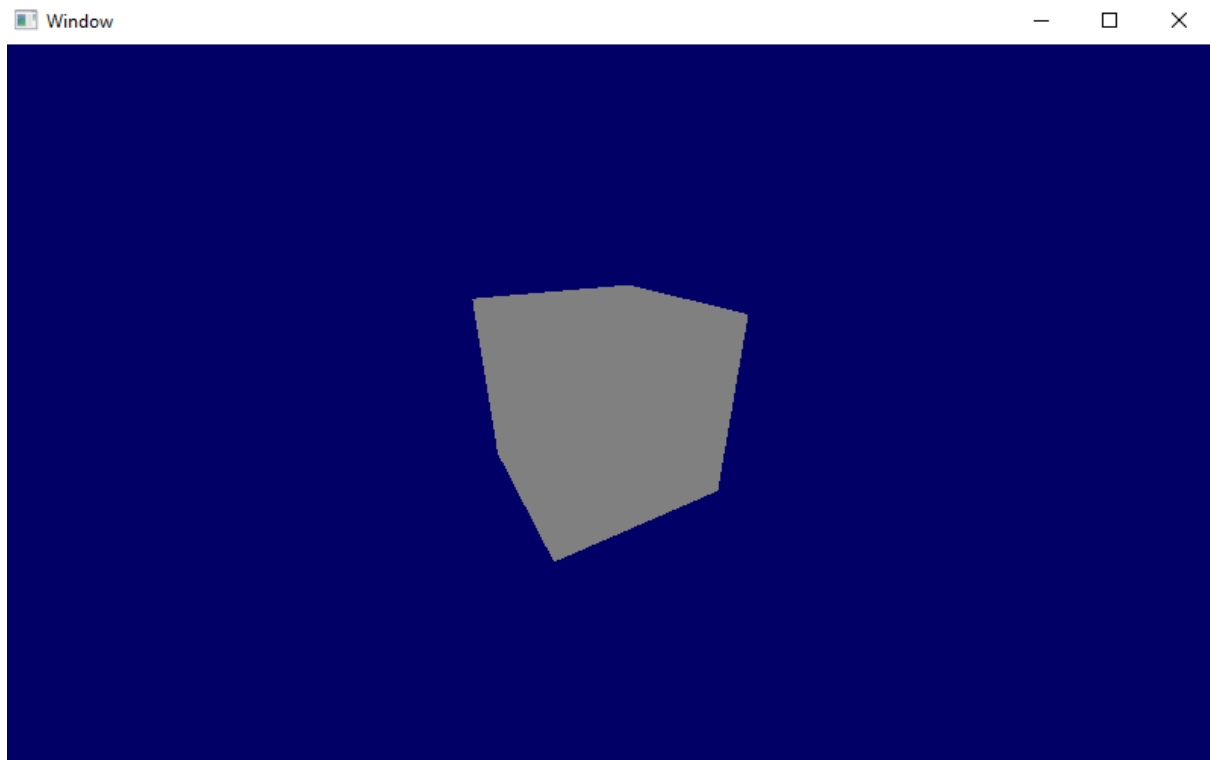


# COMPUTER GRAPHICS ASSIGNMENT 2 REPORT

**Georgiadis Nikolaos**

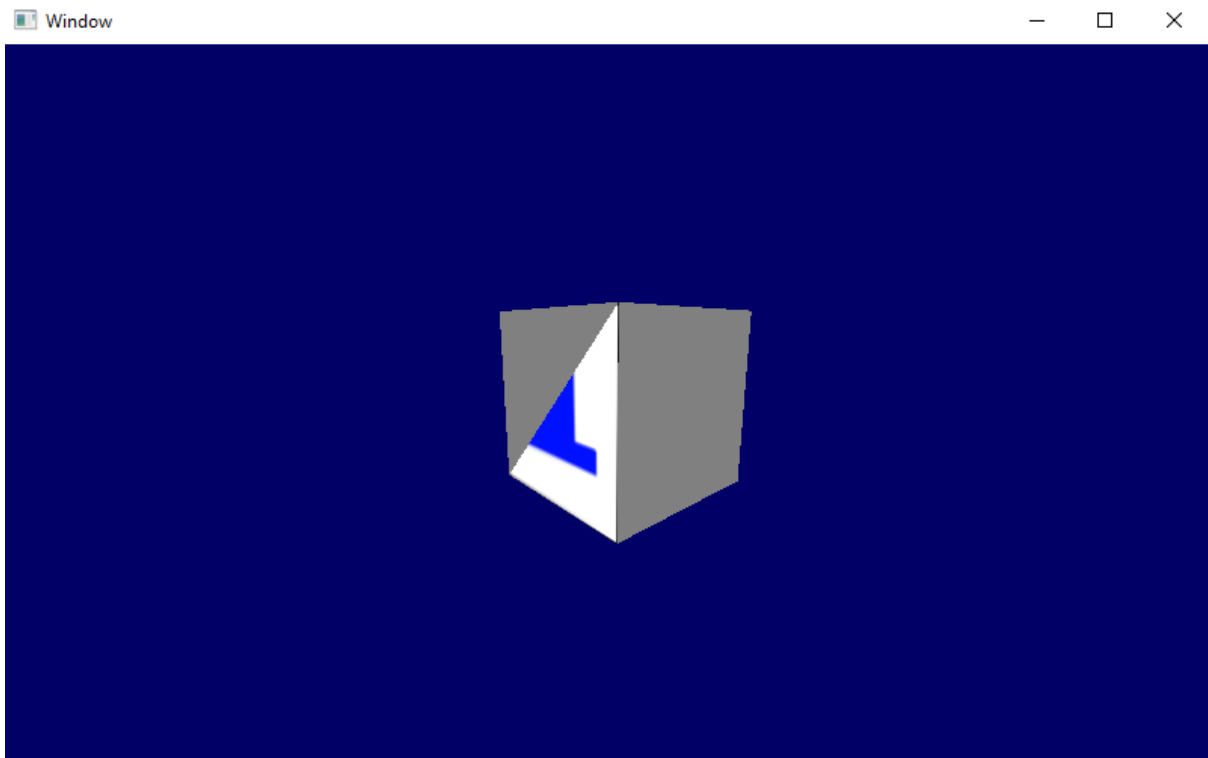
## **Task 3a**

After specifying the vertices in the buffer array we run the CG\_assignment2.py:



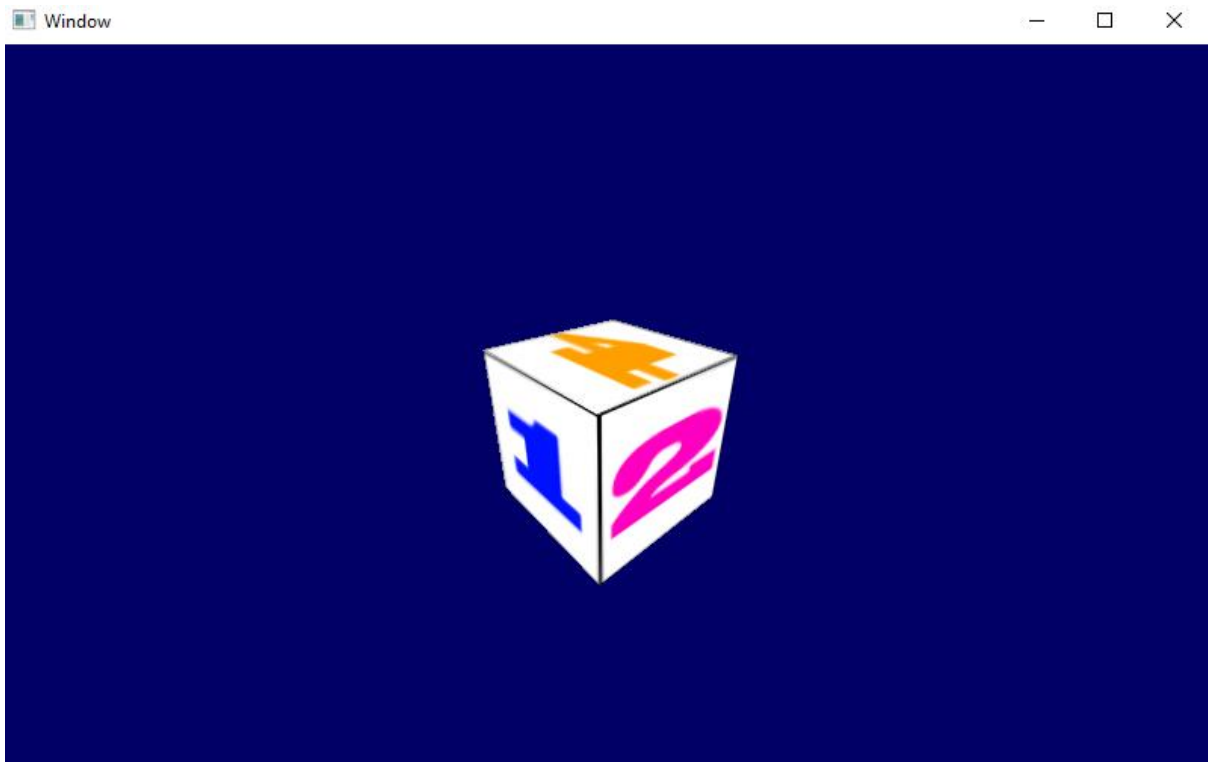
## Task 3b

After buffering the texture data we run the CG\_assignment2.py:



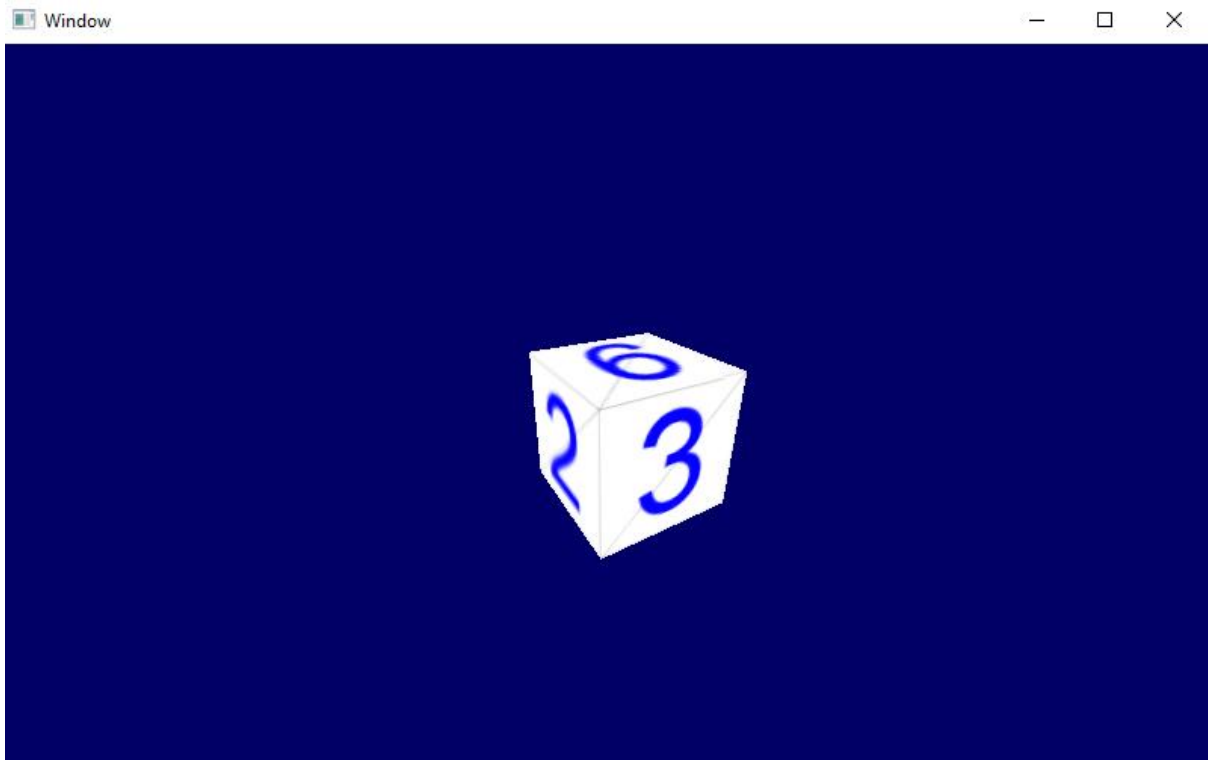
### Task 3c

After filling the missing data of *uv\_buffer\_data* we run the CG\_assignment2.py:



## Task 4

After the implementation of *init\_context\_load* function, we comment the *init\_context\_raw* and uncomment the *init\_context\_load* function (located at main function). Then we run the CG\_assignment2.py:



## Task 5

We subtract a vector4 from the vertices at the vertex\_shader.glsl:

```
void main(){
    // Output position of the vertex, in clip space : MVP * position
    gl_Position = mvp * vec4(vertex_position, 1) - vec4(3,3,0,0);

    // UV of the vertex. Just passing it to the fragment shader
    uv = vertex_uv;
}
```

We divide by 2 the colors at the fragment\_shader.glsl:

```
void main(){
    // Output color = color of the texture at the specified UV

    color = texture(texture_sampler, uv).rgb/2; //we make the colors 50% darker
    //color = vec3(1,1,1) - texture(texture_sampler, uv).rgb; for inverse colors
}
```

Then, when we run the CG\_assignment2.py, the cube's initial location is a little bit more left and down regarding the previous initial location. Also its color is grey:

