

Assignment 2: Report

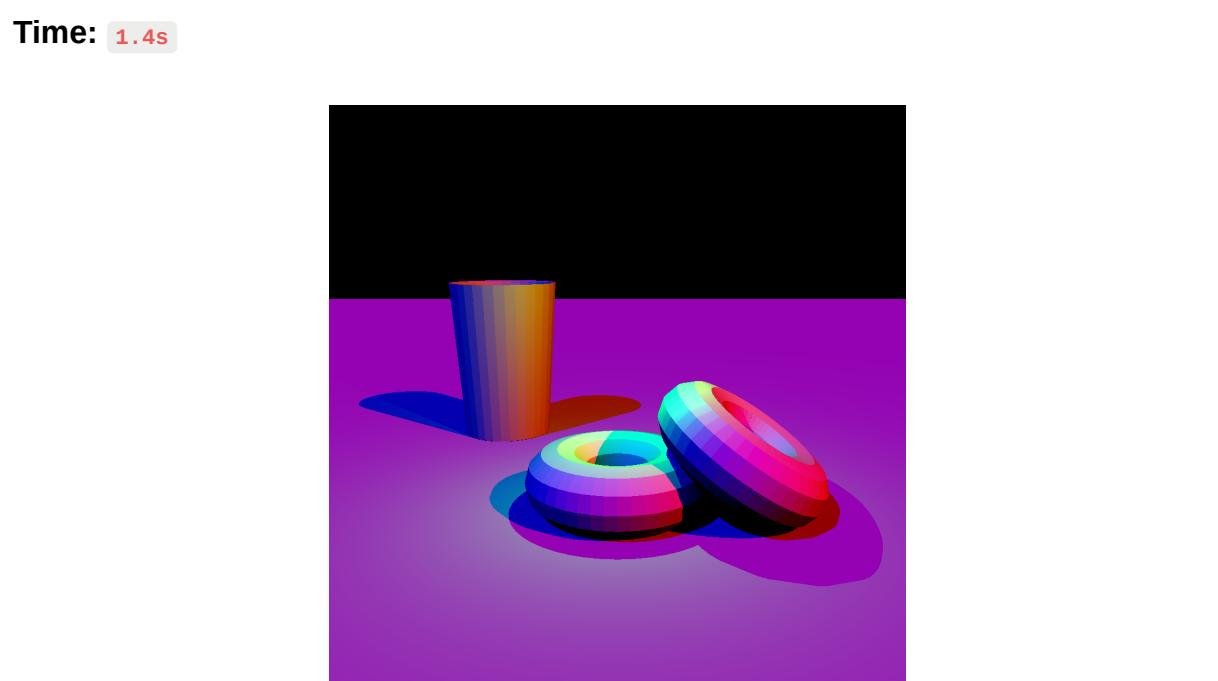
Shreyash Jain (2020101006)

Question 1

Cornell Box



Donuts



Question 2

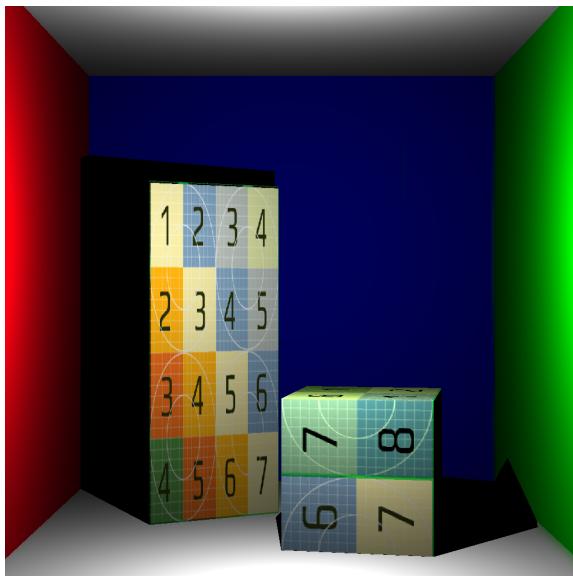
Usage: `./build/render <scene_path> <output_path> <interpolation_variant>`

Cornell Box

Point Light

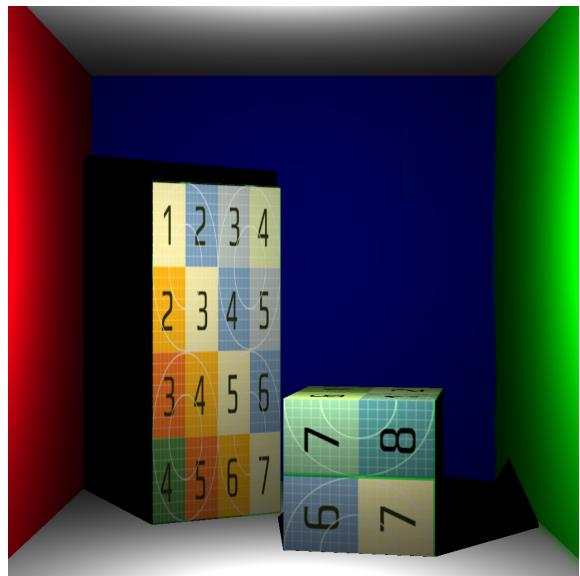
Nearest-Neighbor Interpolation

Time: `0.5s`



Bilinear Interpolation

Time: `0.5s`



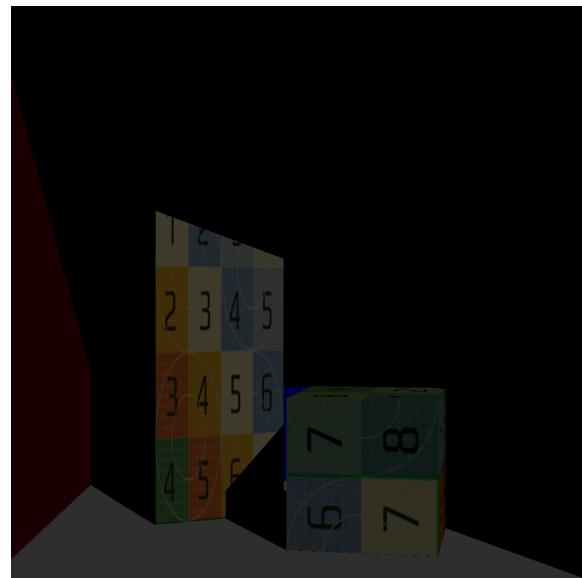
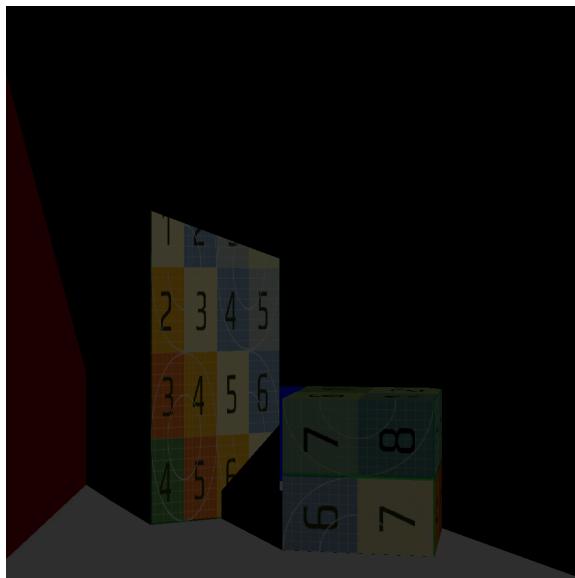
Directional Light

Nearest-Neighbor Interpolation

Time: `0.5s`

Bilinear Interpolation

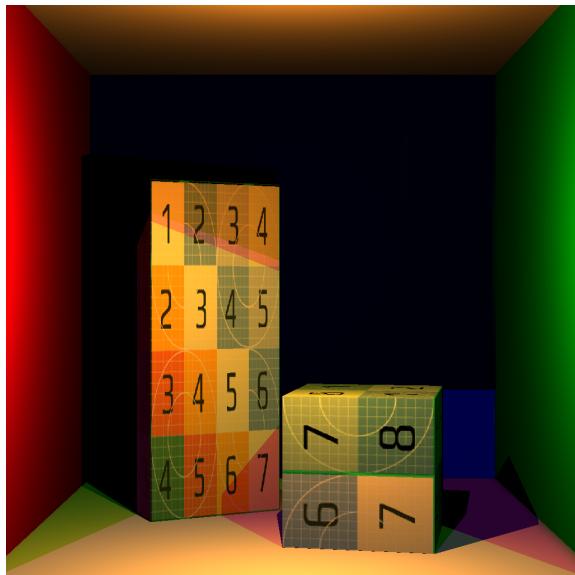
Time: `0.6s`



Many Lights

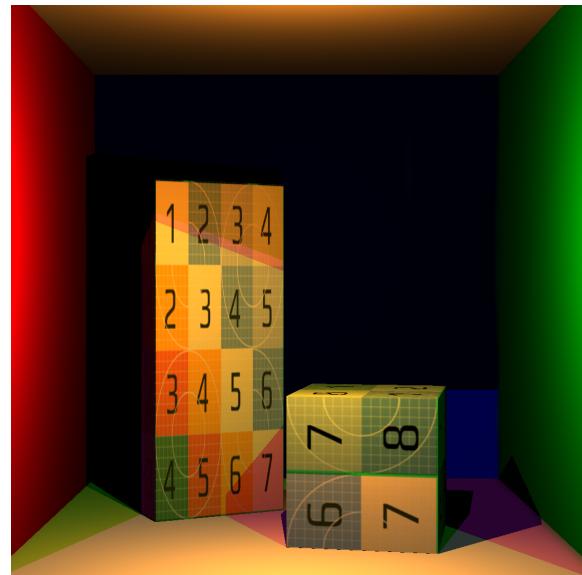
Nearest-Neighbor Interpolation

Time: 0.9s



Bilinear Interpolation

Time: 1.2s



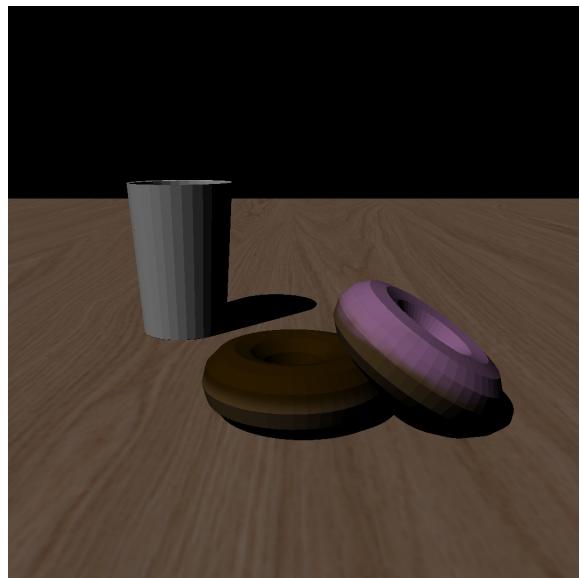
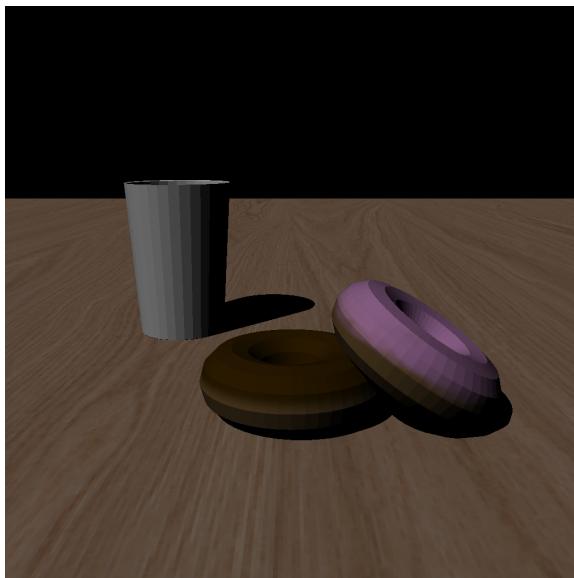
Donuts

Nearest-Neighbor Interpolation

Time: 1s

Bilinear Interpolation

Time: 1.2s



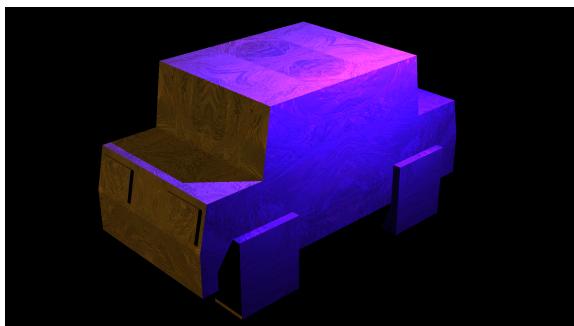
Question 3

Usage: `./build/render <scene_path> <output_path> <interpolation_variant>`

Scene: `car.json`

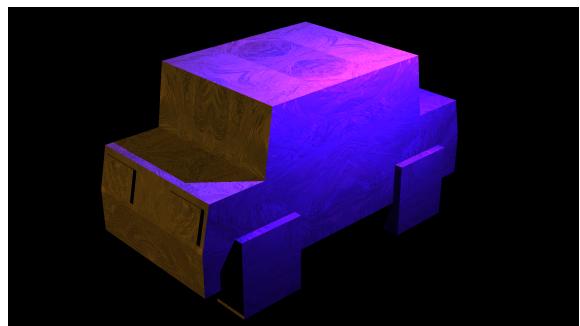
Nearest-Neighbor Interpolation

Time: `0.7s`



Bilinear Interpolation

Time: `0.8s`



Scene: `config.json`

Nearest-Neighbor Interpolation

Time: `0.55s`

Bilinear Interpolation

Time: `0.6s`

