# Interactive Computer Graphics Project 5:
# Environment Mapping

Praveer Tewari u1471817

## Features Implemented

- Background is displayed as a texture on a cubemap
- Rotation of background is correctly accounted for
- Teapot object is reflective showing reflections of the environment on the teapot model
- Rotating environment is reflected correctly on reflections on teapot
- Blinn shading is added to the teapot
- A plane is drawn with environment reflections underneath the teapot
- The reflection of the teapot is also produced on the plane with a render-to-texture.

Screenshots:

## How to use

- “Esc” closes the window.
- Left mouse button (and drag) controls camera angles
- Right mouse button (and drag) controls camera distance
- “F6” recompiles shaders

## Operating System and Compiler notes

Operating System: Ubuntu 22.04.1 LTS (through WSL on windows)
Compiler: I used a Cmake build, which uses gcc to compile.

The project files can be built by running the script ./build.sh.
./run.sh then runs the program from the build folder.

External libraries:

GL, glut and GLEW are linked as specified in the cmakelists.txt file:

```
target_link_libraries(project6 GL)
target_link_libraries(project6 glut)
target_link_libraries(project6 GLEW)
```