The Dolphin model and the Torus model both cast a shadow on Dr. Gordon's Bread

If you move the spotlight to the lower left and fiddle with the Mouse Wheel

you can cast a shadow of the triangle on the bread as well if you so choose.

There are many shadows, and all models are made of different materials.

The spotlight has a control for an On/Off toggle as do the Axes.

I have implemented Soft Shadow techniques, using PCF.

The camera has been fixed since the last assignment.

/////////////////**Models Used**///////////////////////////

//From the book//

Torus, Pyramid, Dolphin

//Downloaded from TurboSquid//

//Royalty-Free License//

https://www.turbosquid.com/FullPreview/Index.cfm/ID/1259409

What I like to call Dr. Gordon's Bread

filename: 'bread.obj'

/////////////////**Materials Used**///////////////////////////

//From the book//

Silver - Dolphin Model

Bronze - Dr. Gordon's Bread Model - looks like a perfect bread texture

Jade - Torus Model

Pearl - Pyramid Model

Jade and Pearl are from Figure 7.3 on page 167

/////////////////**Camera Controls**///////////////////////////

'w' - forward

'a' - left

's' - backward

'd' - right

'q' - up

'e' - down

'down arrow key' - pan down

'up arrow key' - pan up

'left arrow key' - pitch left

'right arrow key' - pitch right

'x' - reset Camera position

/////////////////**Axis**/////////////////////////
'y' - toggle XYZ-Axis On/Off

X-Axis(Red), Y-Axis(Green), Z-Axis(Blue)

/////////////////**Light Controls**/////////////////////////
'i' - forward

'j' - left

'k' - backward

'l' - right

'u' - up

'o' - down

'n' - toggle SpotLight On/Off

'm' - reset Light Position

Mouse Drag to change the x-axis and y-axis position of the light

 Note: the Mouse Drag has some bugs but it works well enough.

Mouse Wheel scroll to change the z-axis position of the light

********Note:** *************

Please maximize the screen to make the Mouse Drag work the best. I had to do some

funky calculations to get it working properly enough. It does not follow the mouse perfectly

but it is close, please be kind.

Screenshot:

Tested and Works on Hydra.