****

**UNIVERSITY OF PETROLEUM & ENERGY STUDIES**

**SCHOOL OF COMPUTER SCIENCE**

***Department of Cybernetics***

**GRAPHICS AND ANIMATIONS TOOLS**

LAB FILE

SESSION(2020-21)

Course: BTech with specialization in Open Source & Open Standards

Submitted to: Submitted by:

Dr. Durgansh Sharma Ashish Pandey

Associate Professor SAP: 500063104

Department of Cybernetics Roll no: R100217014

**Experiment-6**

**AIM-** Design of 3D Hut using Blender

[Link to the Experiment](https://drive.google.com/file/d/1Kca8PA2lB1-Rz1nPX2fb_ZMxX9aYfloy/view?usp=sharing)

**Step 1:** Open Blender, Create a blank file

**Step 3:** Add a plane and scale it to an average area of a hut, using Shift+A>S.

**Step 4:** Switch to edit mode using TAB.

**Step 5:** Add some loop cuts using CTRL+R, to create a division of rooms inside the hut. Loop cuts are needed to be added with respect to X and Y axis.

**Step 6:** Now delete any one face to bring the plane in L shape and extrude (E) it with respect to the z-axis such that it is equal to the two floors.

**Step 7:** To make a triangular-domed roof, extrude from middle from both ends of the hut. Add a similar plane in between both floors to differentiate between them.

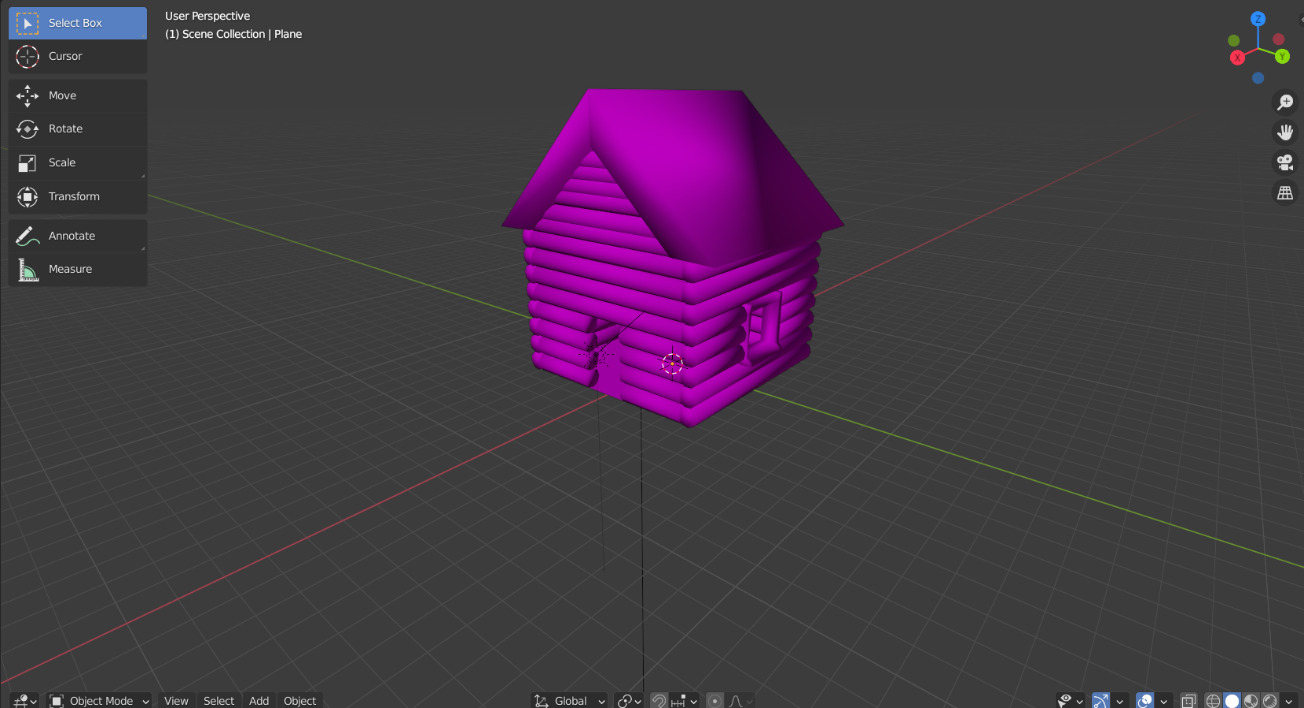
**Step 8:** Now add some pillars to the HUT by adding a plane first and then by scaling it with respect to z-axis. Now add the same pillar to every corner by just duplicating it. (shift+D)

**Step 9:** To create the roof, add a cylinder apart from the hut. Switch to wireframe mode and select the half of cylinder and delete the vertices. Now duplicate it using (shift+D) and rotate it 180 degree and align both cover each other. Now add an array modifier (x-axis) and increase the number according to the length of the roof. Add a second array modifier (y-axis) and increase the number according to the breadth of roof.

**Step 10:** Add the same to the top of hut by tilting it according to shape of the hut. And add the copy of same to other parts of roof.

**Step 11:** Now add a camera and a light source to it. And arrange the camera to the best fit view.

**OUTPUT SCREEN:**

****

