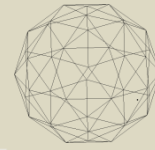


Basic 3D animation using Blender

SKANI101x



Modeling Demo – Table

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Outline

- Selecting the base object
- Object modification
 - Creating a table top surface
 - Creating the table legs

Table



Selecting the base object

- First study the object you have to model
- It is a very crucial step to select the base object from the available default object in Blender (cube, cylinder, cone, etc.)
- There are various aspects and reasons associated with it, like:
 - The object is cuboidal or spherical in geometry
 - The shape of the object matches any basic object
 - What approach we are going to model it, top to bottom, bottom to top or some specific part of the object

Base object for Table

A Table has cuboidal geometry

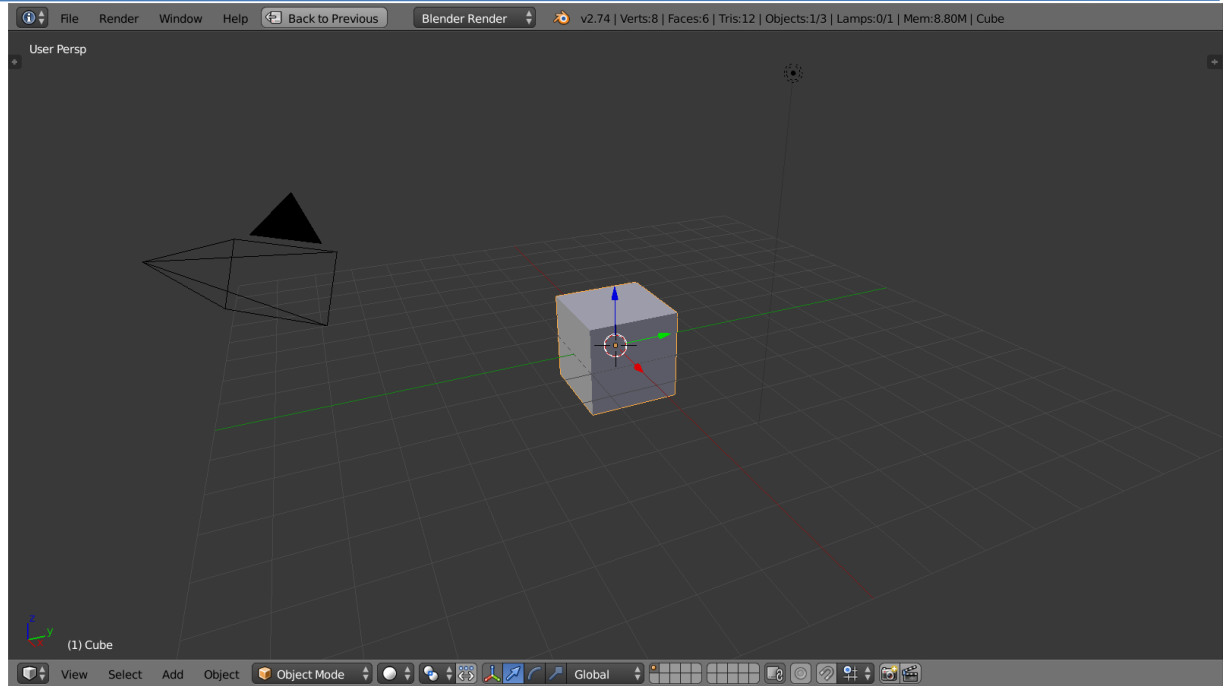
- Base object can be:
 - Plane
 - Cube

We will start with the default cube.



Start Blender

- Start a new Blender file
- Select the cube
(Right click)



Change view

First create the table top thickness

- Go to front orthographic view
(Num 1 + Num 5)

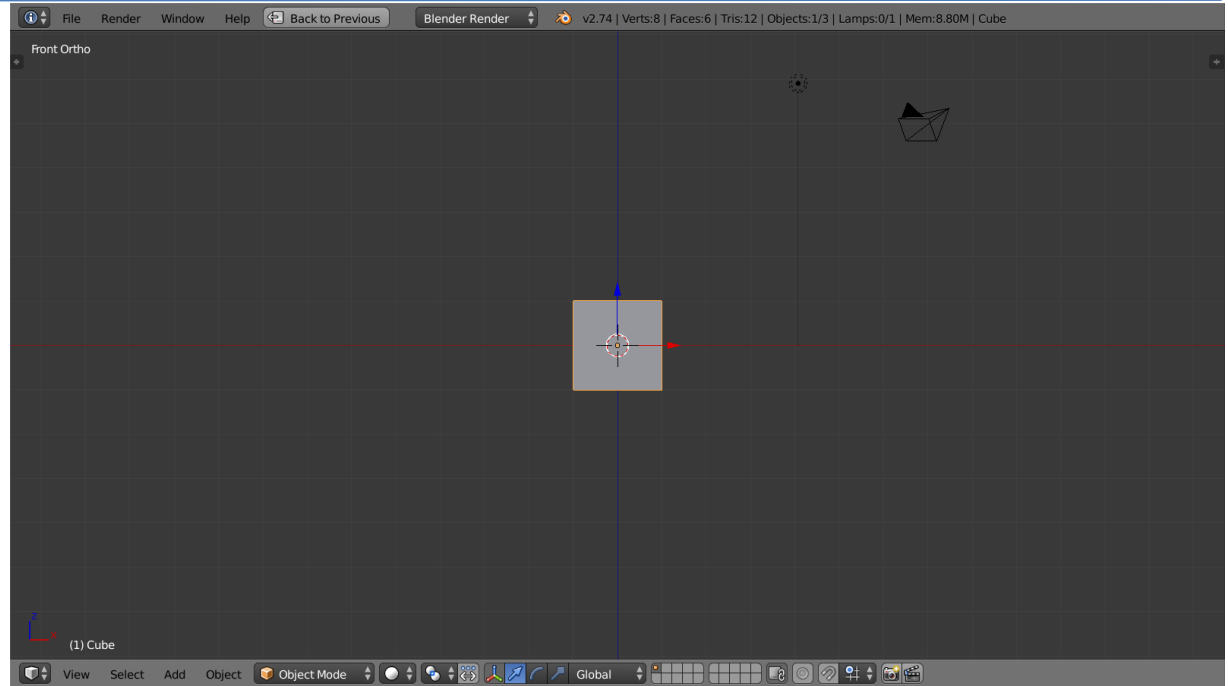


Table top thickness

Depending upon the thickness required for the table, reduce the cube size in Z direction

- Scale-in the cube in Z direction ($S + Z$)

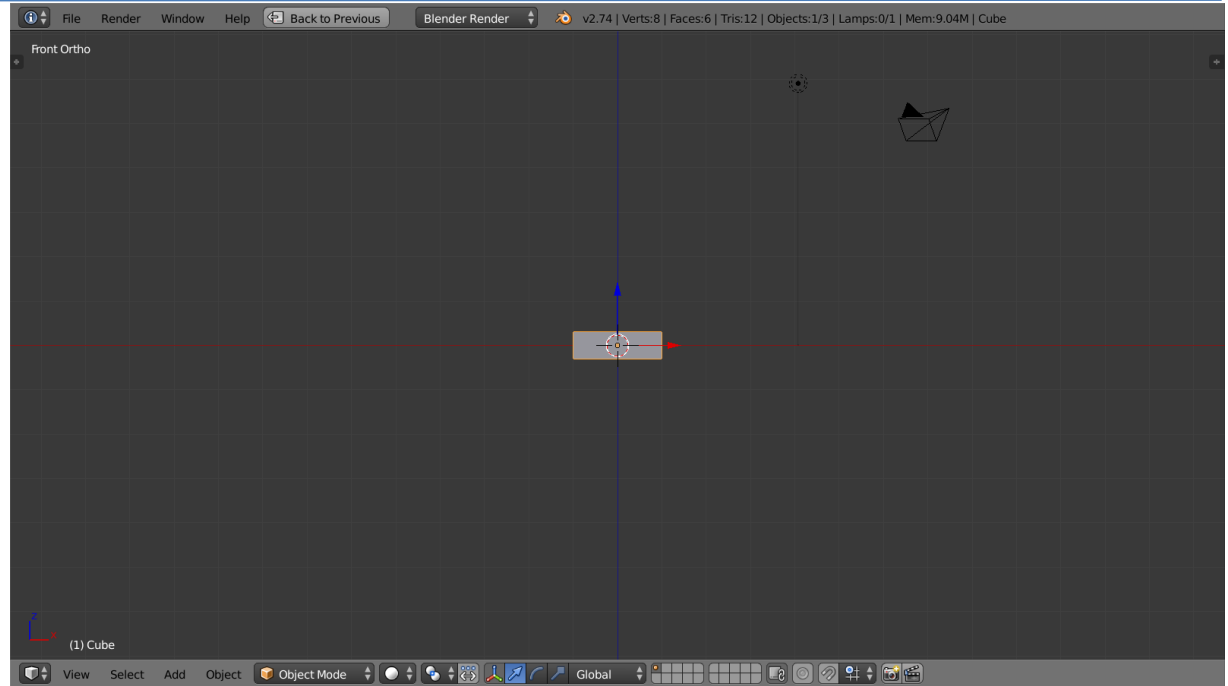


Table top surface

After deciding the table top thickness, now create the top surface of the table.

Top surface can be best viewed from top view

- Top view (Num 7)

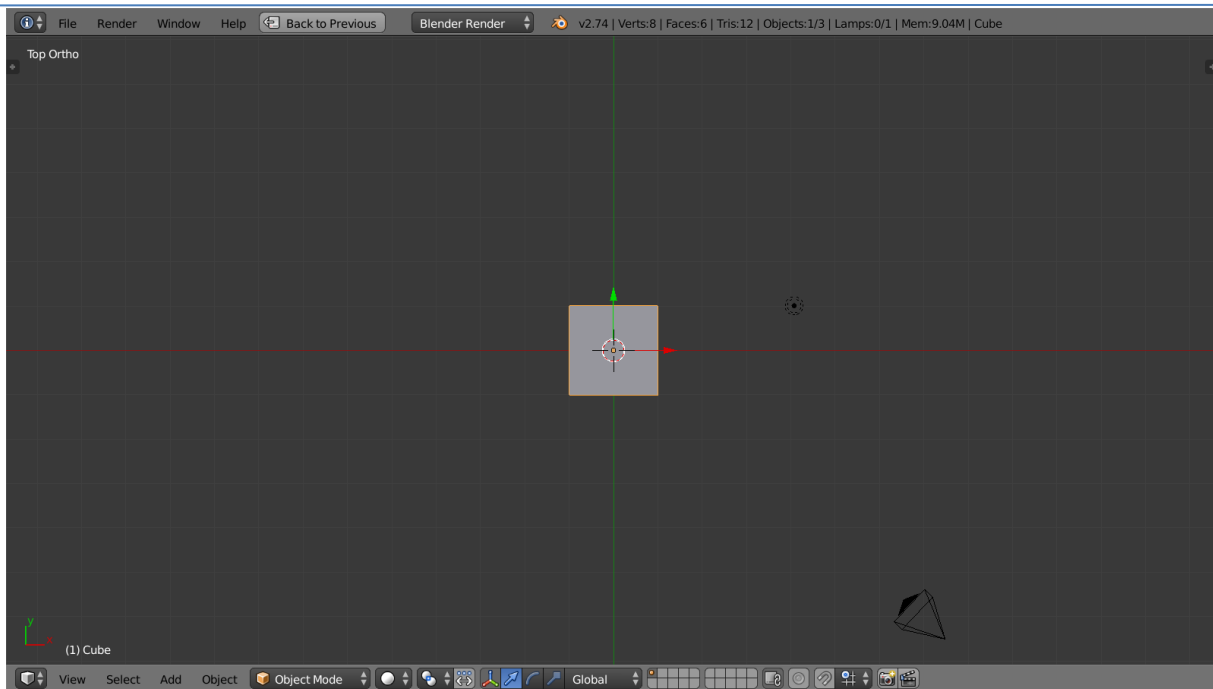


Table top surface

Depending upon how big the table surface is, scale-out the cube.

If the cube is scaled in all 3 axis, the table thickness will also change, so scale the cube in X and Y axis only.

- Scale-out in X and Y axis (S + Shift + Z)

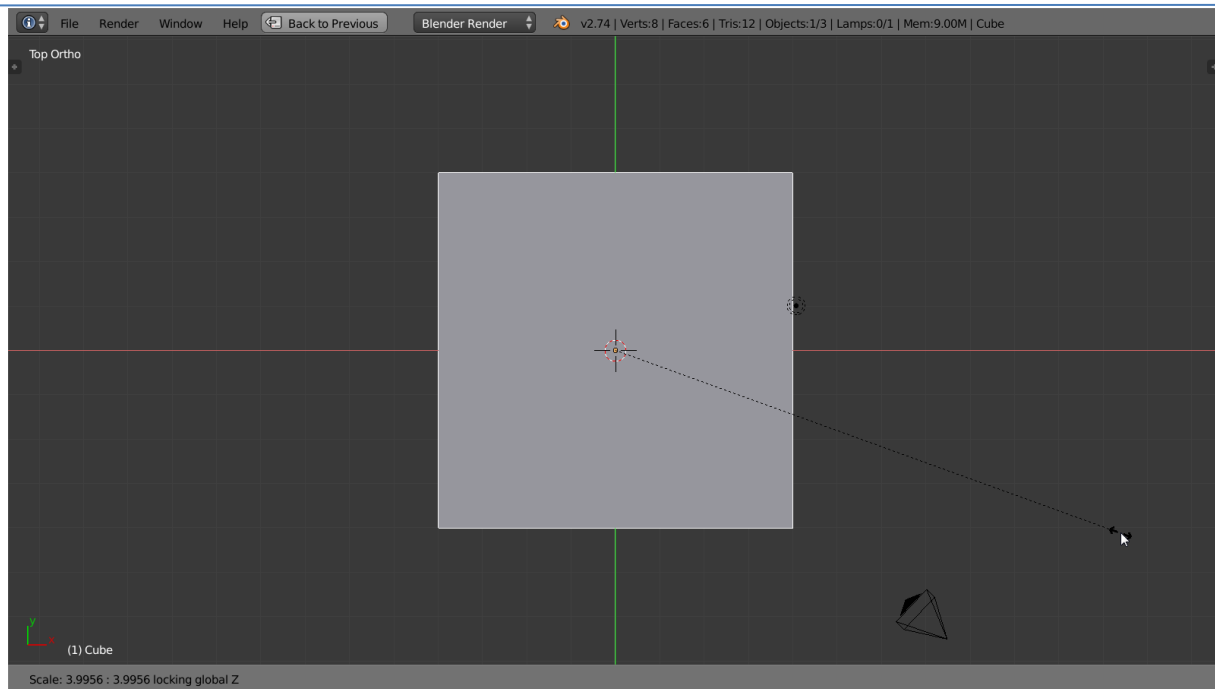


Table top surface

The Table top surface is ready, now we create legs of the table.

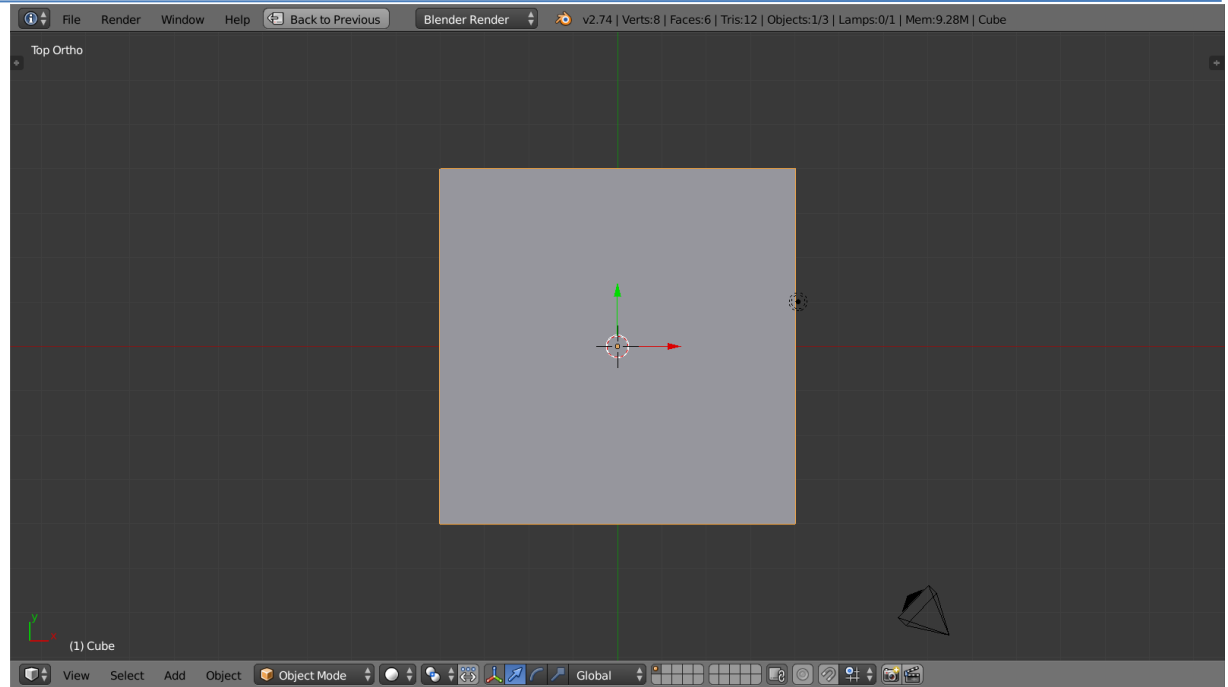
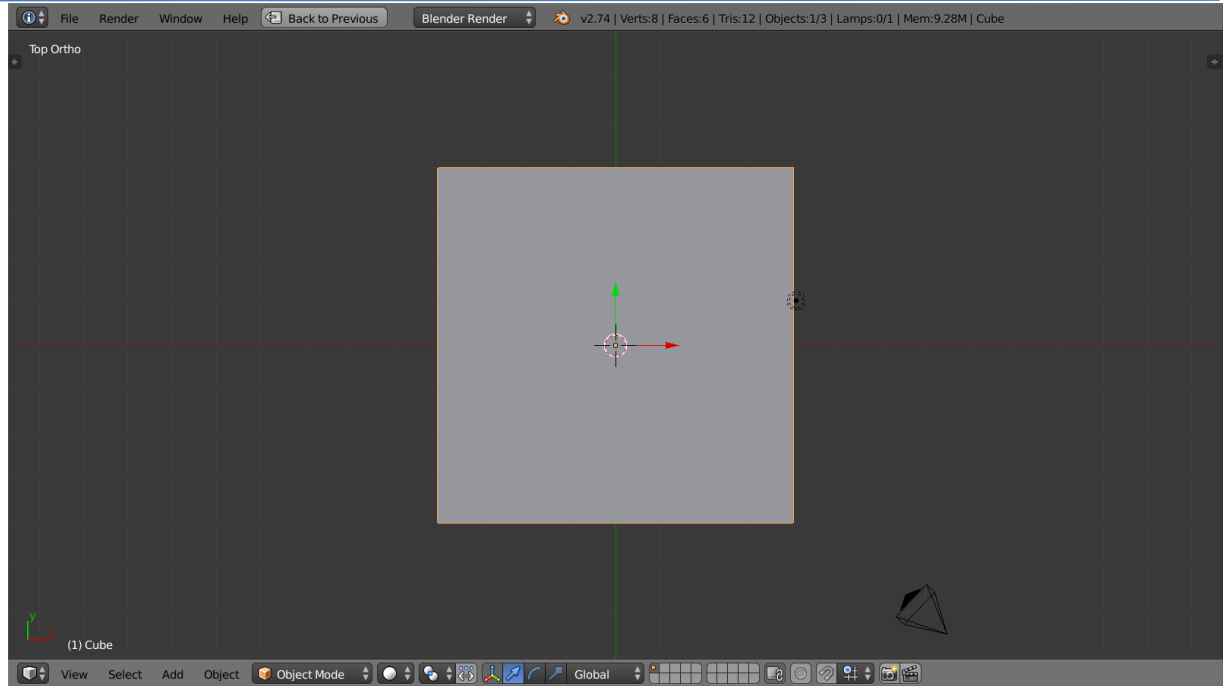


Table legs

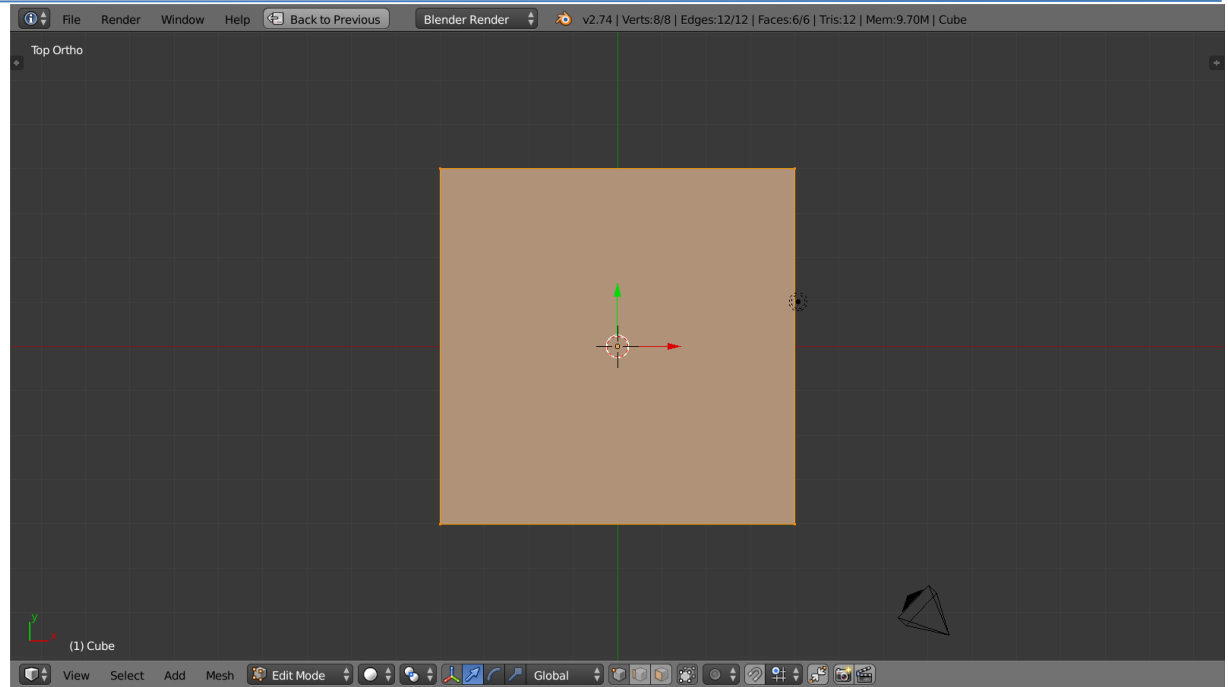
A Table is one single object, we cannot add another object or cubes as table legs.

We need to create the legs out of the same object, for this we need to go into edit mode and use Loop cuts and extrude modifications.



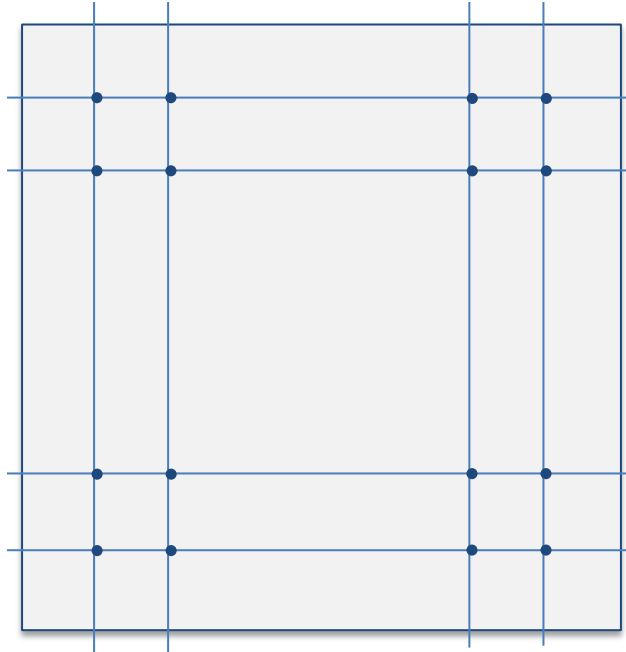
Edit mode

- Go to edit mode (Tab)



Extra geometry

Need four sets of vertices at four corners of the object, so that we can extrude the legs out of it



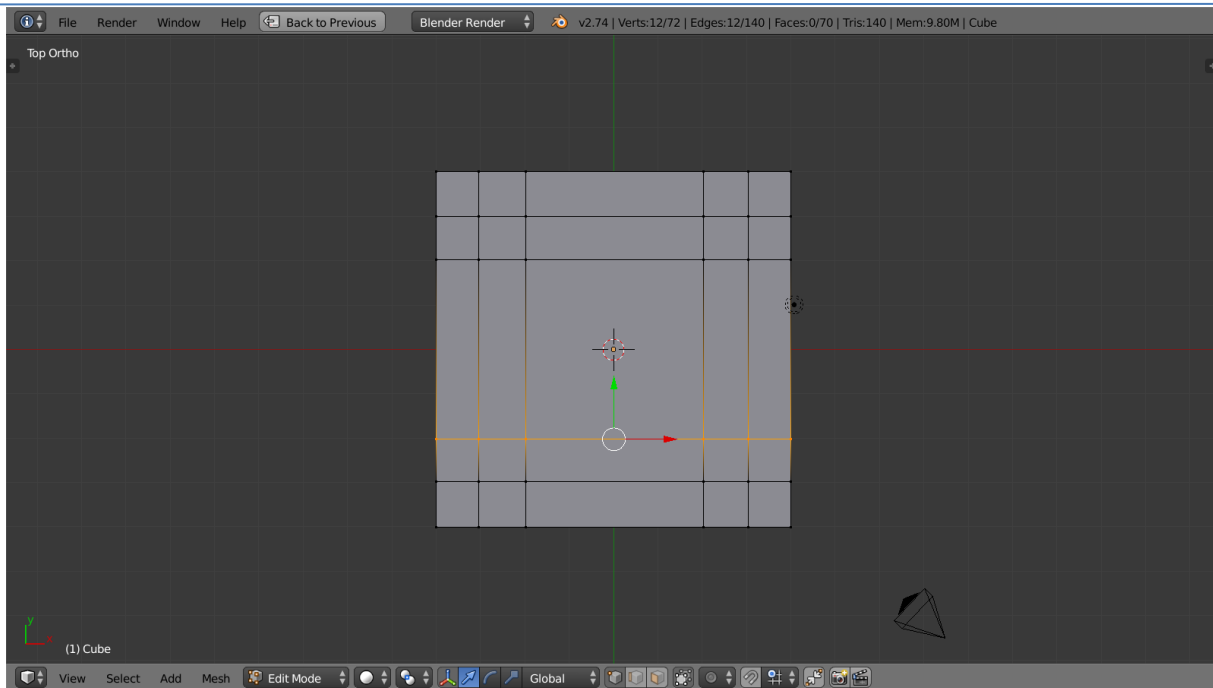
Add loop cuts

To add extra vertices add
8 loop cuts 4 horizontally
and 4 vertically

- Loop cut (Ctrl + R)

Tip:

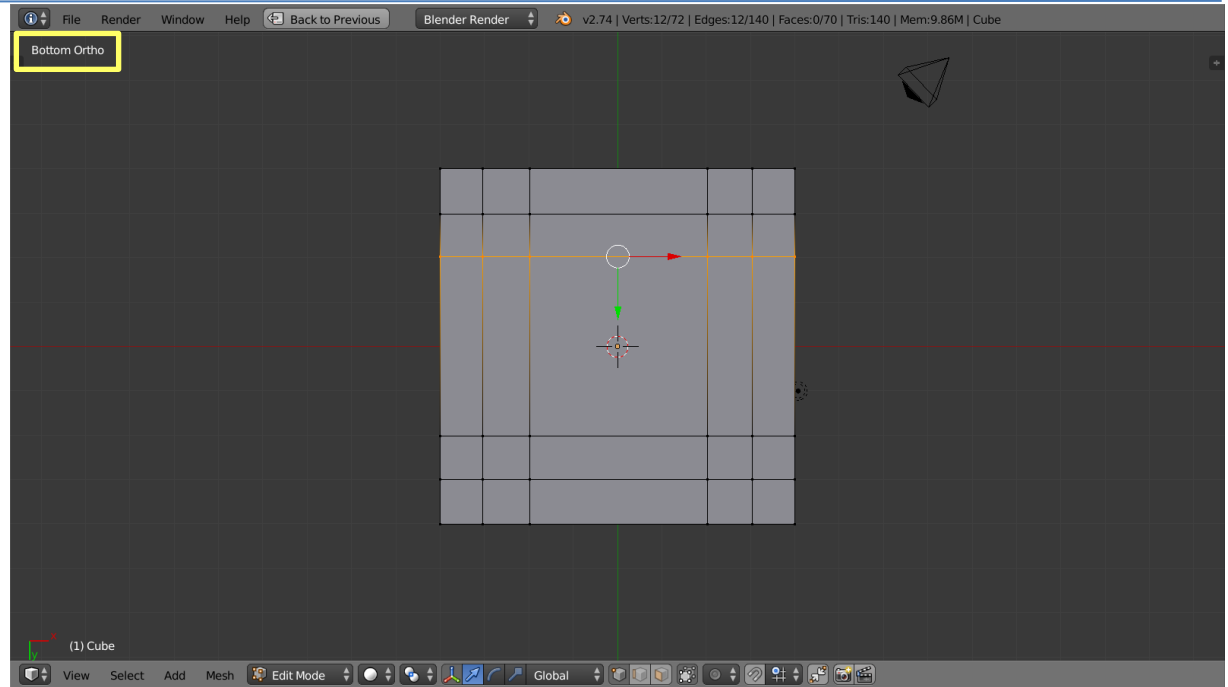
Use gridlines for better
placement of the loop
cuts



Change view

As the table legs will be extruded from the bottom part of the object, switch to bottom view.

- Bottom view (Ctrl + 7)

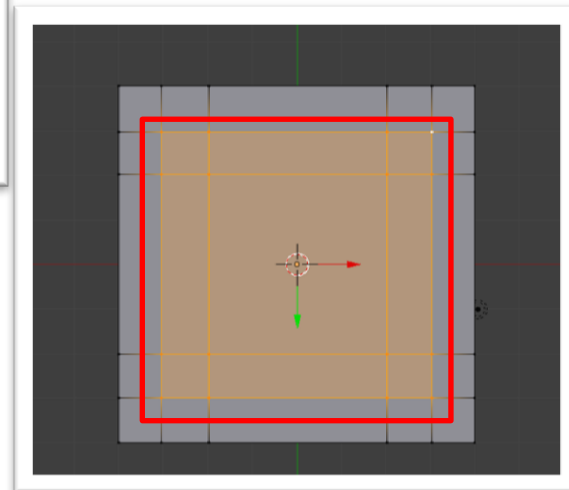
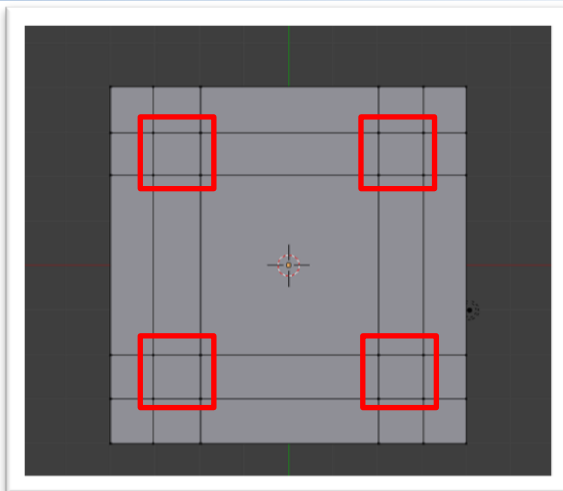




- Numpad 1, 3 and 7 are shortcut for front, right and top view.
- For back, left and bottom view combine it with Ctrl key.
 - Back view (Ctrl + 1)
 - Left view (Ctrl + 3)
 - Bottom view (Ctrl + 7)

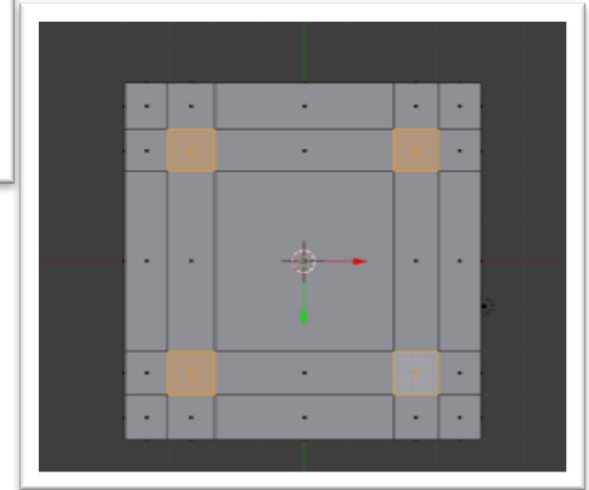
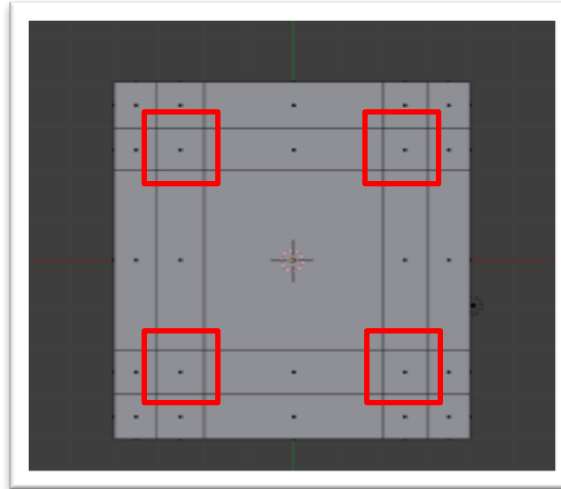


- To extrude the table legs, select the vertices created by loop cuts crossings
- It will also select the adjacent edges because when two adjacent vertices are selected it also selects the edge joining the two vertices
- To extrude the table legs switch to Face selection mode



Select faces

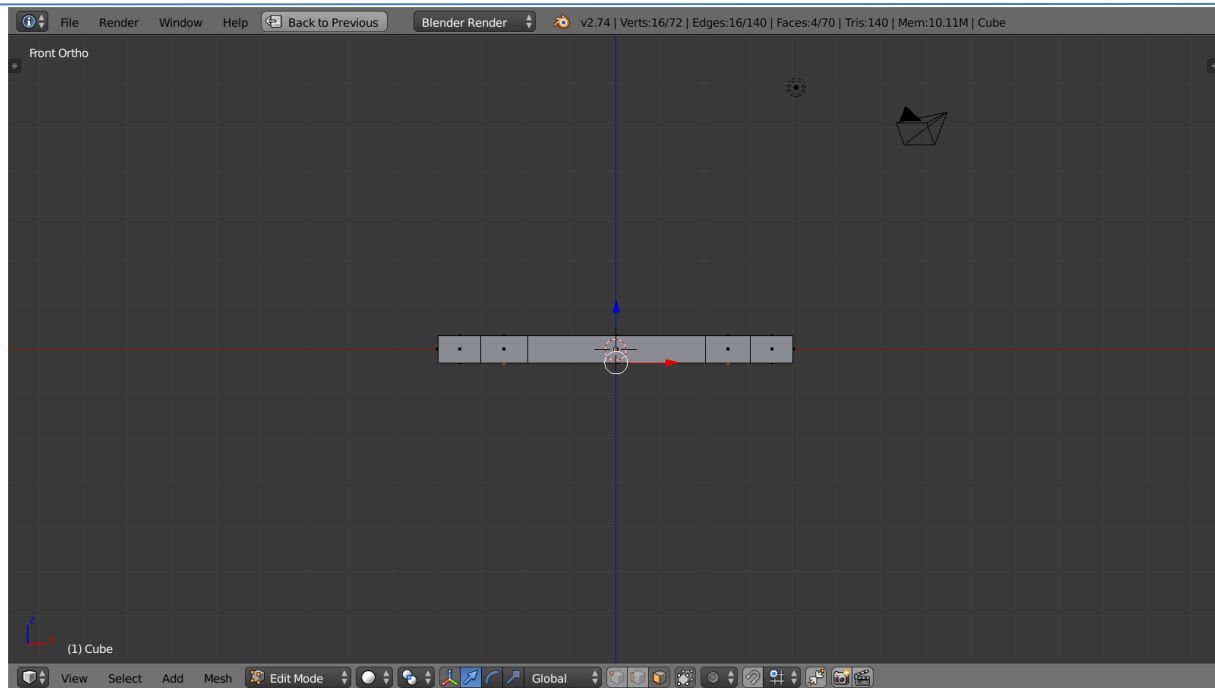
- Deselect the vertices (A)
- Switch to Face selection mode (Ctrl + Tab)
- Select the four faces (Shift + Right click)



Change view

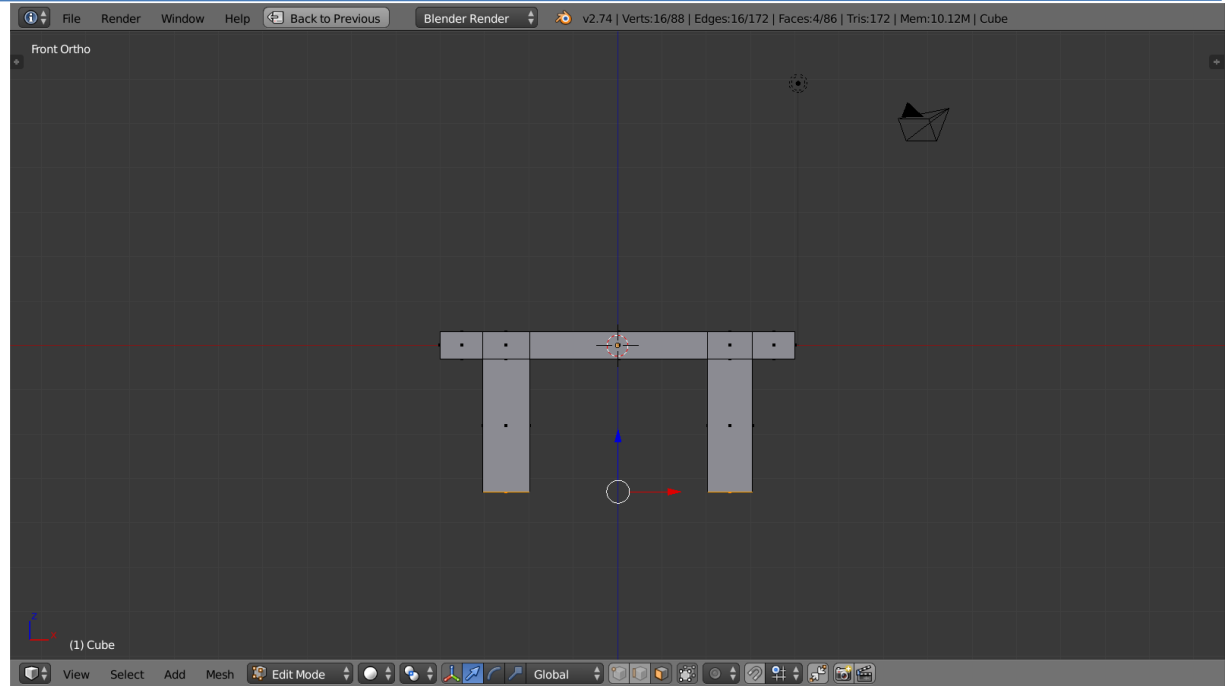
After selecting the faces,
Now extrude the faces to
Create the table legs.
For better view the see
Table legs' height switch
To front view.

- Front view (Num 1)



Extrude

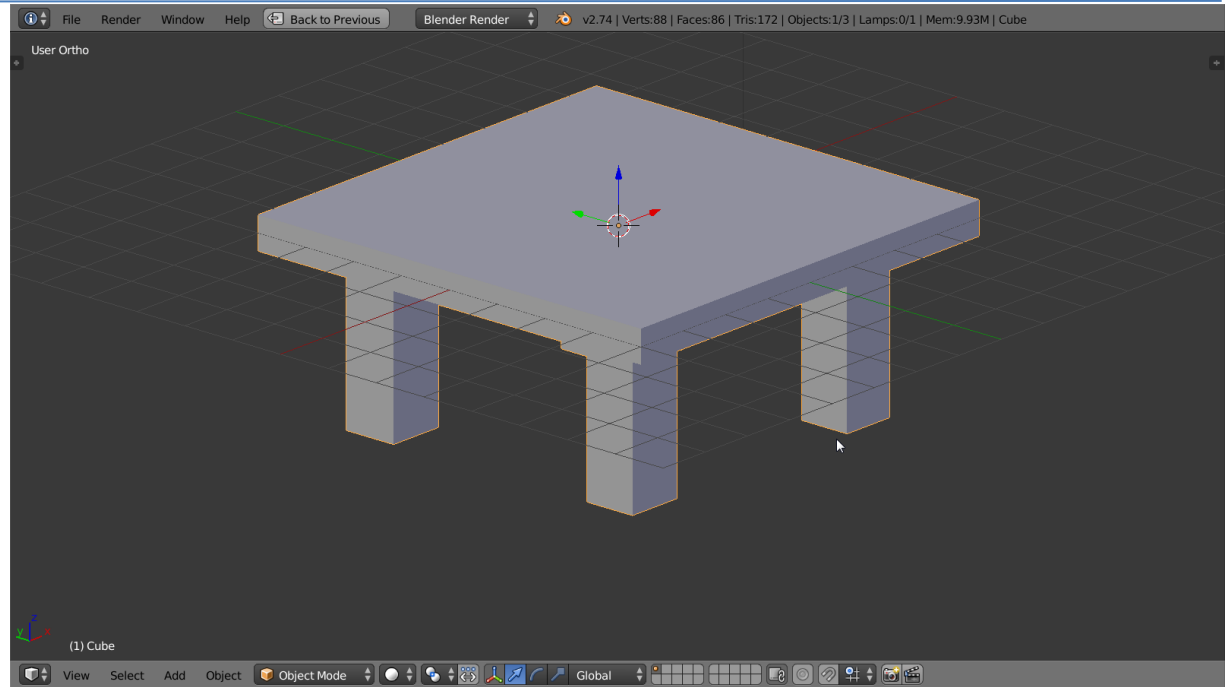
- Extrude (E)
- Move mouse to extend the extruded surface
- To accept (Left click or Enter)



Table

- Object mode (Tab)

Table is ready !



Next session

Material