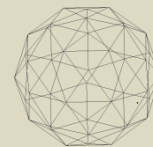


Basic 3D animation using Blender

SKANI101x



Object modification – Loop cuts

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Outline

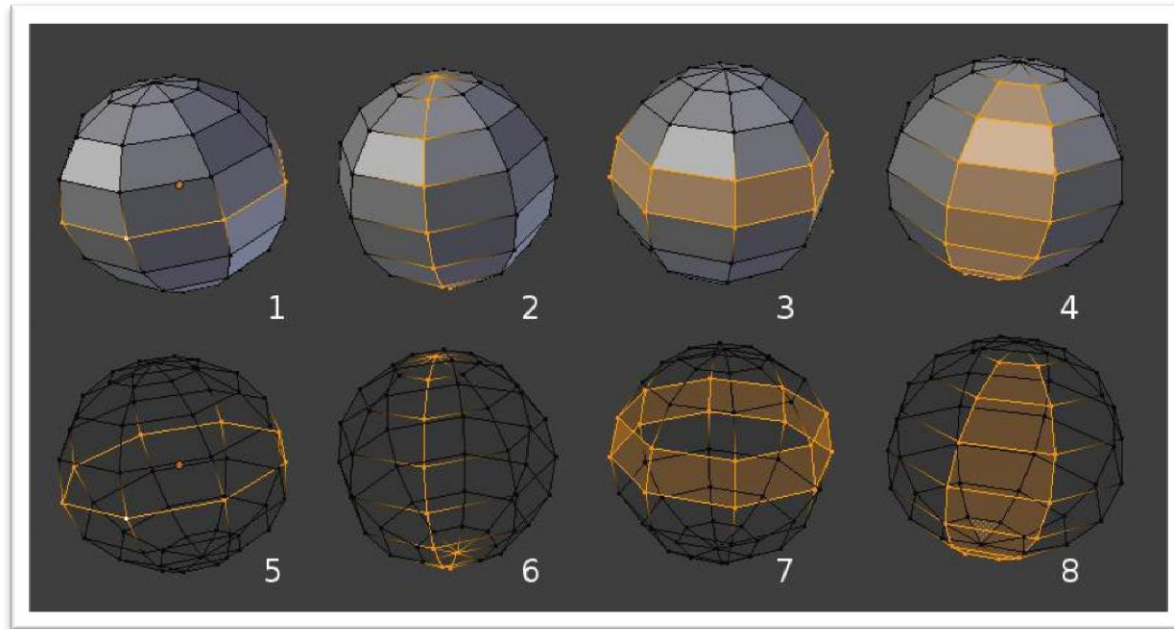
- Loops
 - Single loop cuts
 - Pre-visualizing the cut
 - Positioning the new edge loop
 - Multiple loop cuts
- Select loop
- Delete loop

Loops

Single and multiple loop cuts

Loops

Loops are paths or edges which start and end at the same point



Loop cuts

Loop cut splits a loop of faces by intersecting the chosen edge.

Loop cut: (Ctrl + R)

It has two steps:

1. Pre-visualizing the cut
2. Positioning the new edge loop



- Loop cuts are used to create extra geometry (vertices, edges or faces).
- Loop cuts are added in Edit mode only, loop cut shortcut (Ctrl + R) does not work in Object mode.

Examples



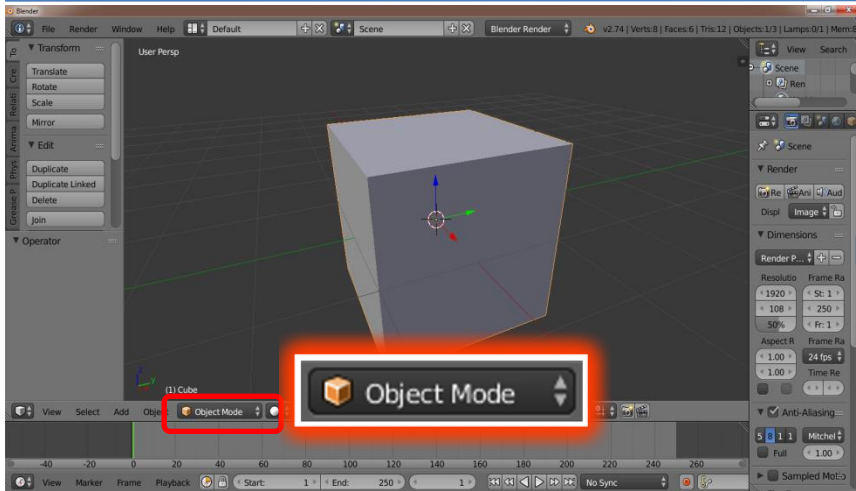
A mug can be created from a cylinder but to create the handle extra geometry is required.



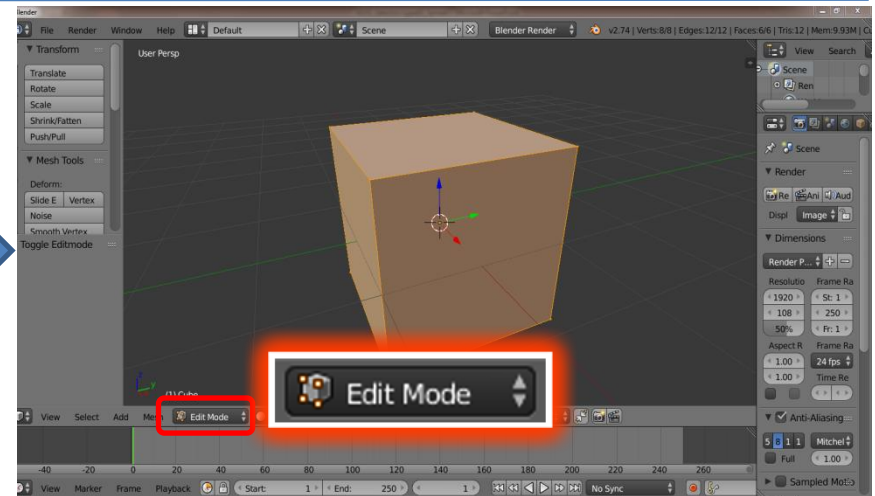
A computer monitor can be created from a cube or a plane but to create its base, loop cuts are required.

Single loop cut

Edit mode



Object mode



Edit mode



Tab

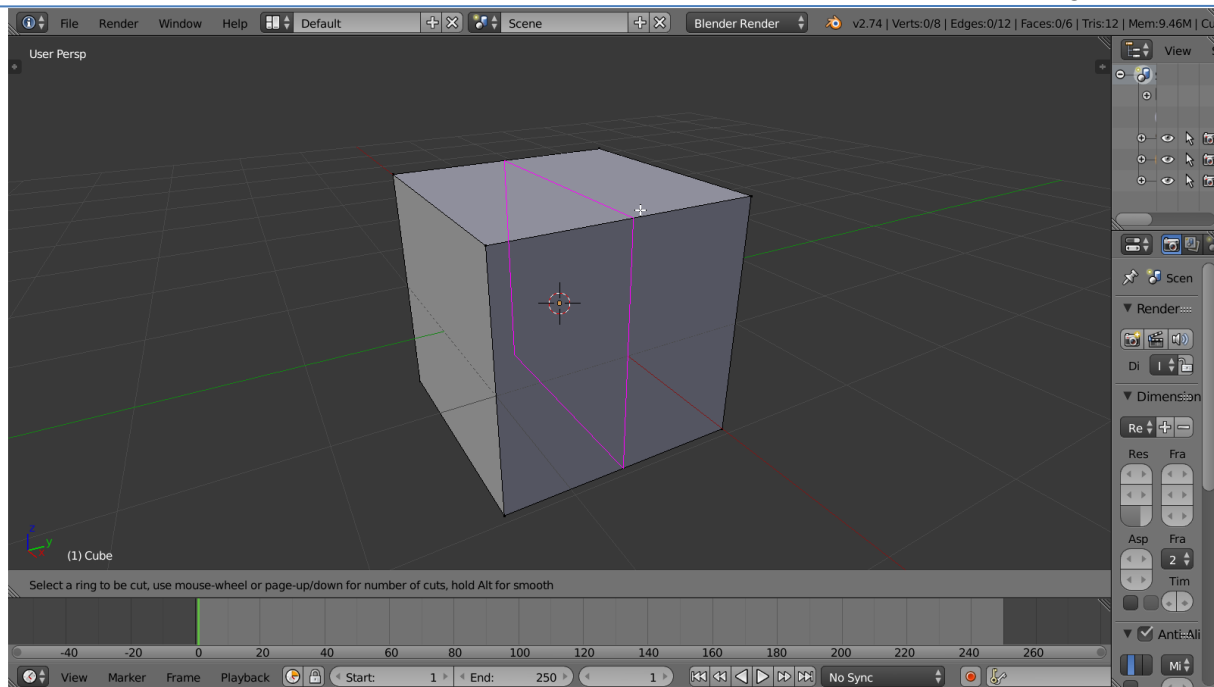
Actions

Toggle between Edit mode and Object mode

1. Pre-visualizing the cut

After the loop cut tool is activated (**Ctrl + R**):

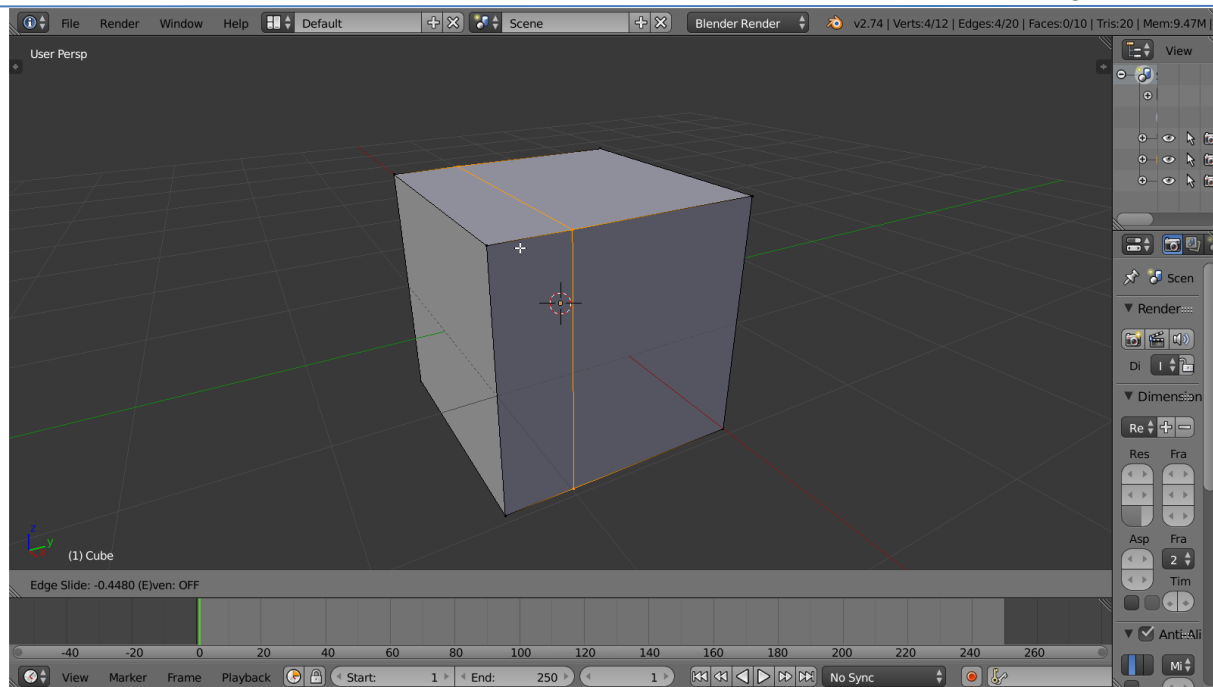
- Move the cursor over the desired edge
- The cut to be made is marked with a magenta coloured line as the mouse is moved over various edges
- Choose the edge (**LMB**)
- Cancel the operation (**Esc**)



2. Positioning the new edge loop

Once edge is chosen:

- Move the mouse along the edge to determine the loop placement
- Clicking again to confirm the cut position (LMB)

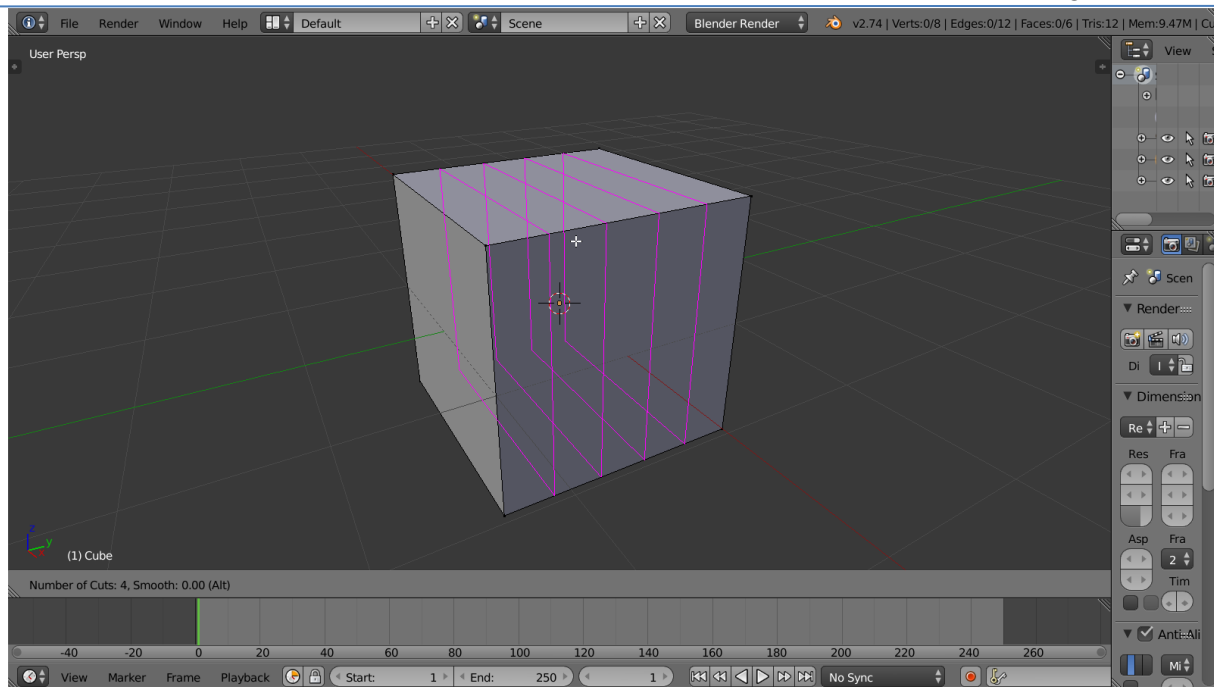


Multiple loop cuts

1. Pre-visualizing the cuts

After the loop cut tool is activated (**Ctrl + R**):

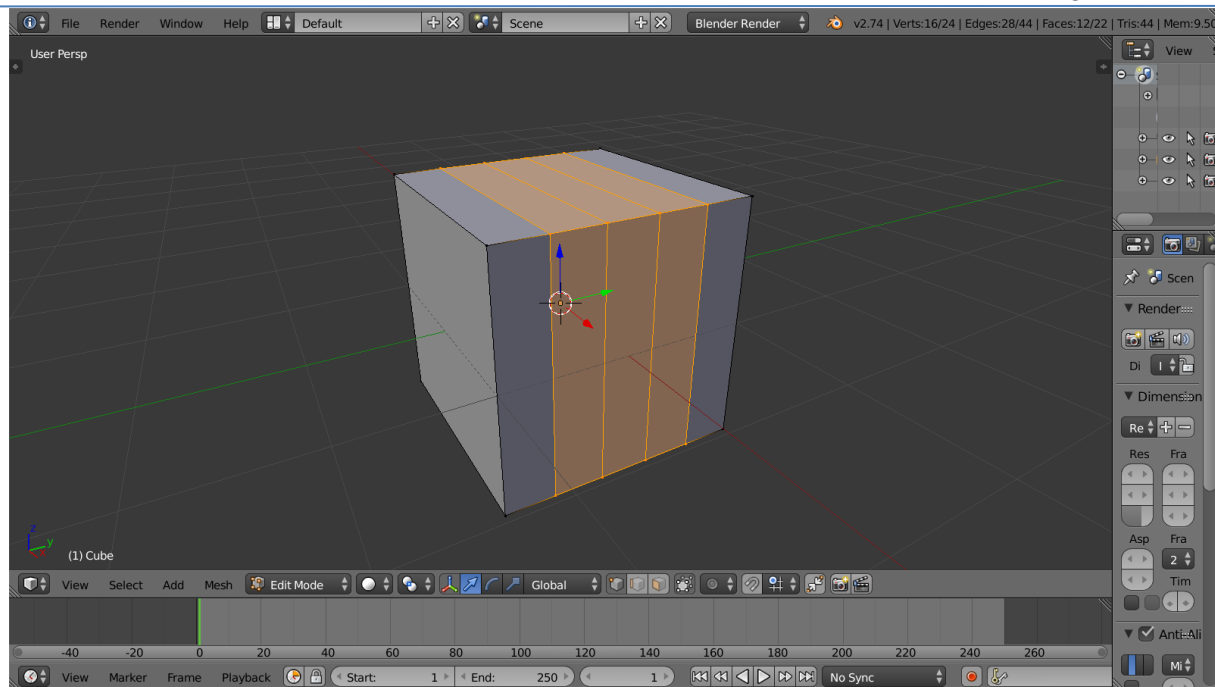
- Move the cursor over the desired edge
- Increase the number of loops (**Scroll in – MMB**)
- Decrease the number of loops (**Scroll out – MMB**)
- Cancel the operation (**Esc**)



2. Positioning the new edge loop

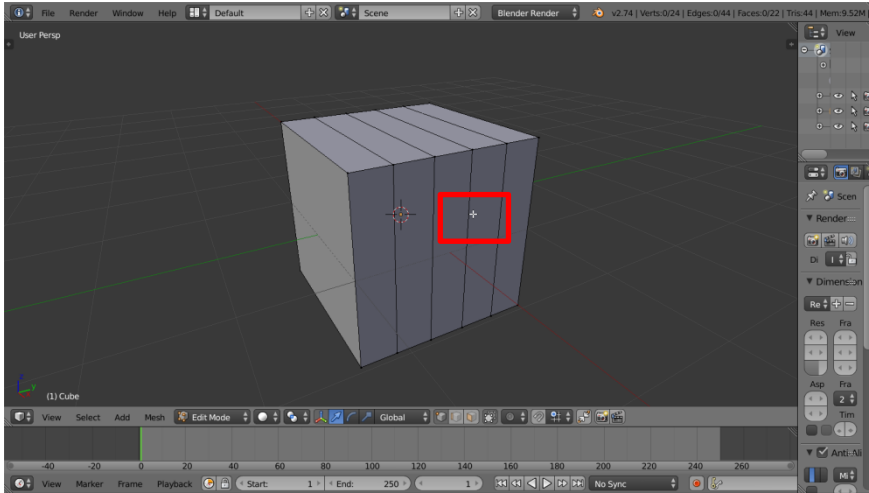
Once the edge and number of loop cuts are decided:

- Cuts are uniformly distributed
- Move the mouse along the edge to determine the loops placement
- Clicking again to confirm the cuts position (LMB)

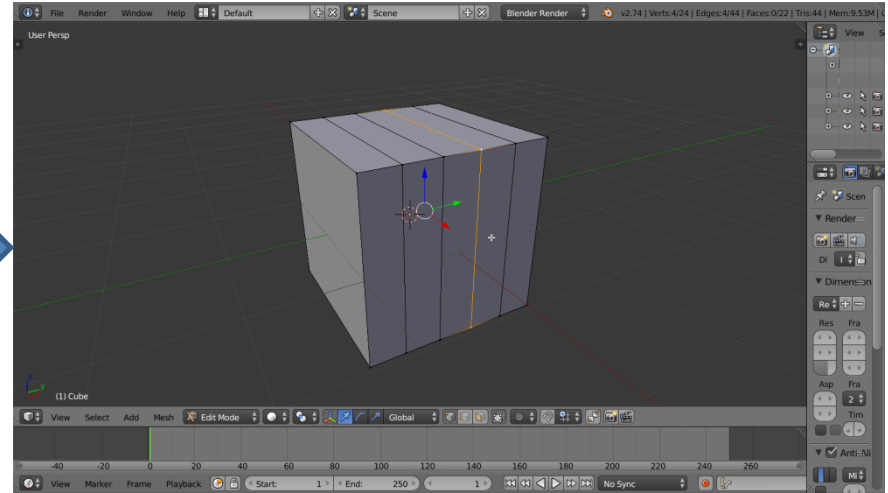


Select loop

Steps to select a loop:



- Move the cursor over the desired edge of the loop



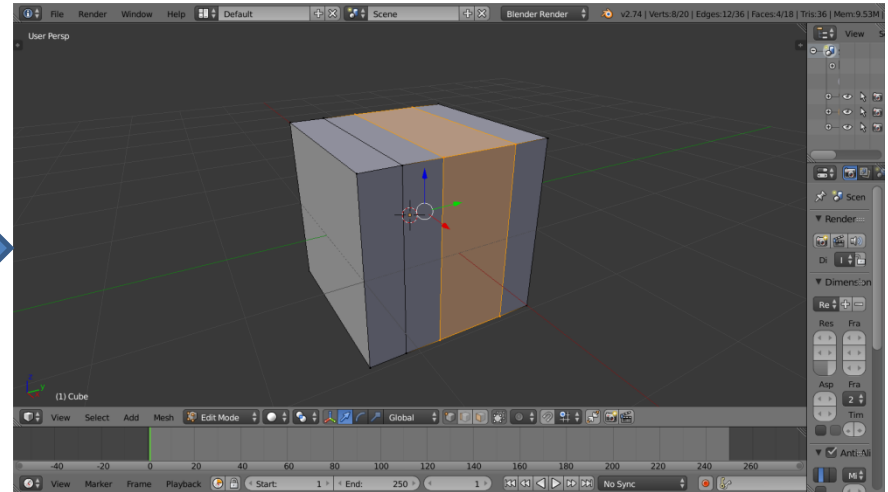
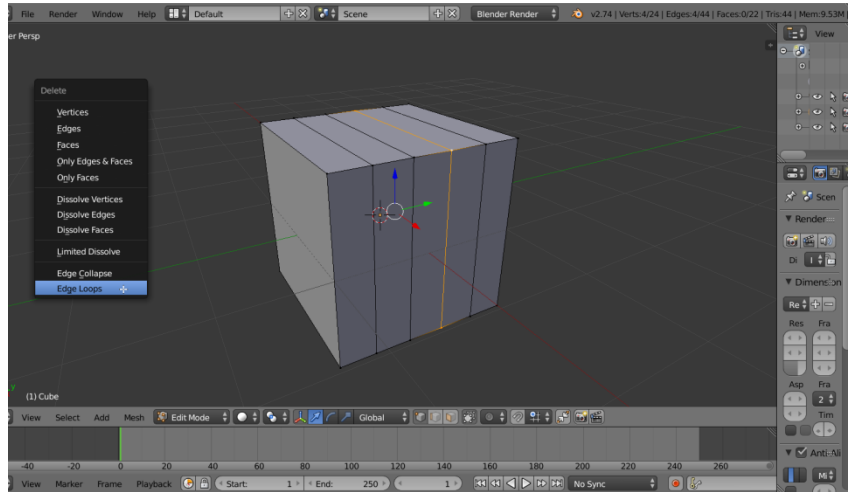
- To select the entire loop
(Alt + RMB)

Delete loop

Delete loop

After selecting the loop:

- Press Delete or X button and select 'Edge loops' option



Next session

Object modification – Extrude