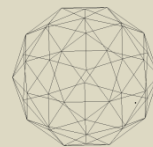


# Basic 3D animation using Blender

SKANI101x



## Blender interface: Mouse inputs

---

**Dr. Sameer Sahasrabudhe**

Nitin Ayer and Sneha Sanglikar




IIT Bombay

# Outline

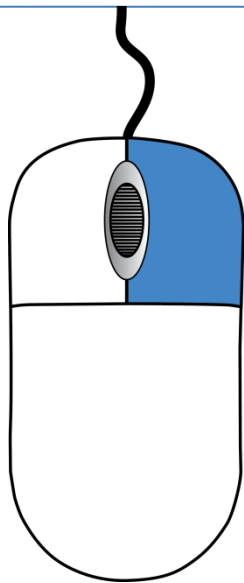
---

- Mouse actions
- Concept of 3D cursor
- Keyboard shortcuts

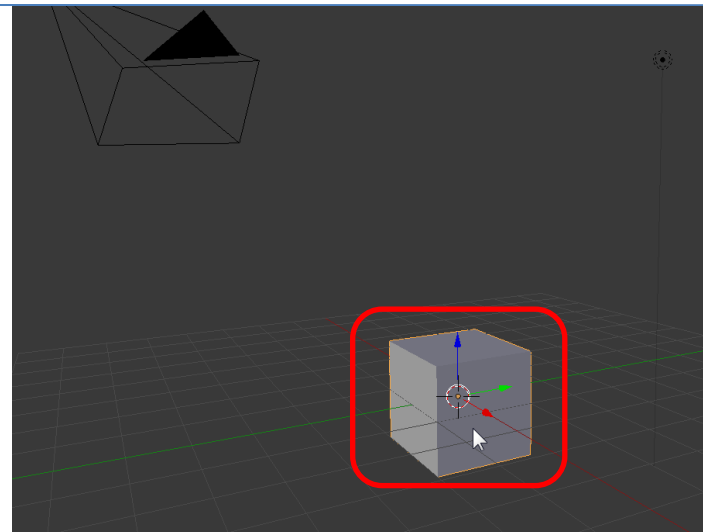
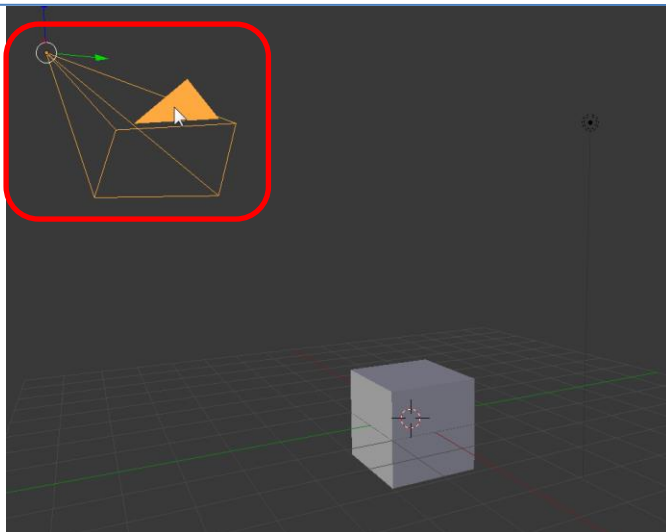
# Mouse actions

		Action	On screen response
Right button		Click	Select object
Scroll button		Scroll in	Zoom in
		Scroll out	Zoom out
		Hold and move	Orbit 3D view
		Shift, hold and move	Pan 3D view
Left button		Click	Move 3D cursor

# Mouse actions – Right button



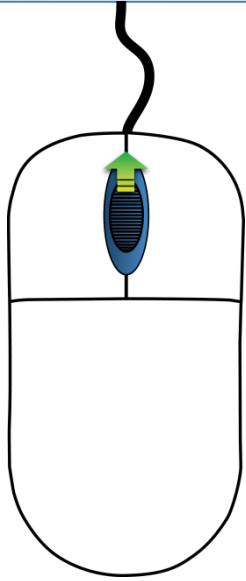
Right click on any  
object to select  
that object.



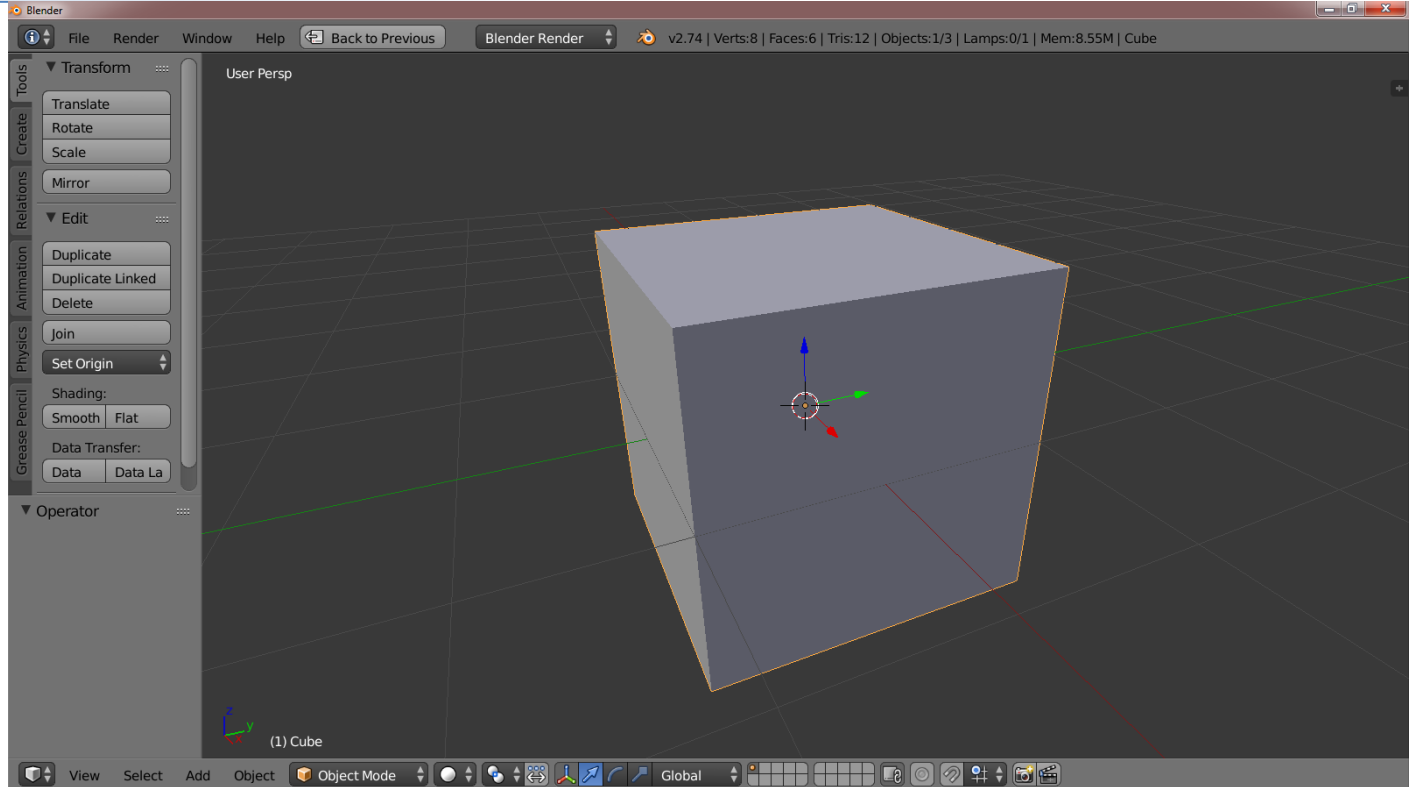


- A yellow outline is displayed, when an object is selected in 3D view.
- Mouse action and its response are for 3D view window only.
- Mouse actions and its responses differ in Mac OS.
- Typically, selecting an object is done by clicking left mouse button, but in Blender **right mouse button** is clicked to select an object.
- Lamp and camera are also objects.

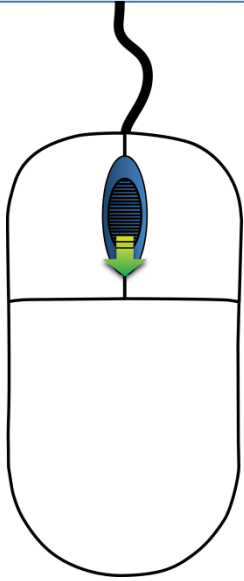
# Mouse actions – Scroll button



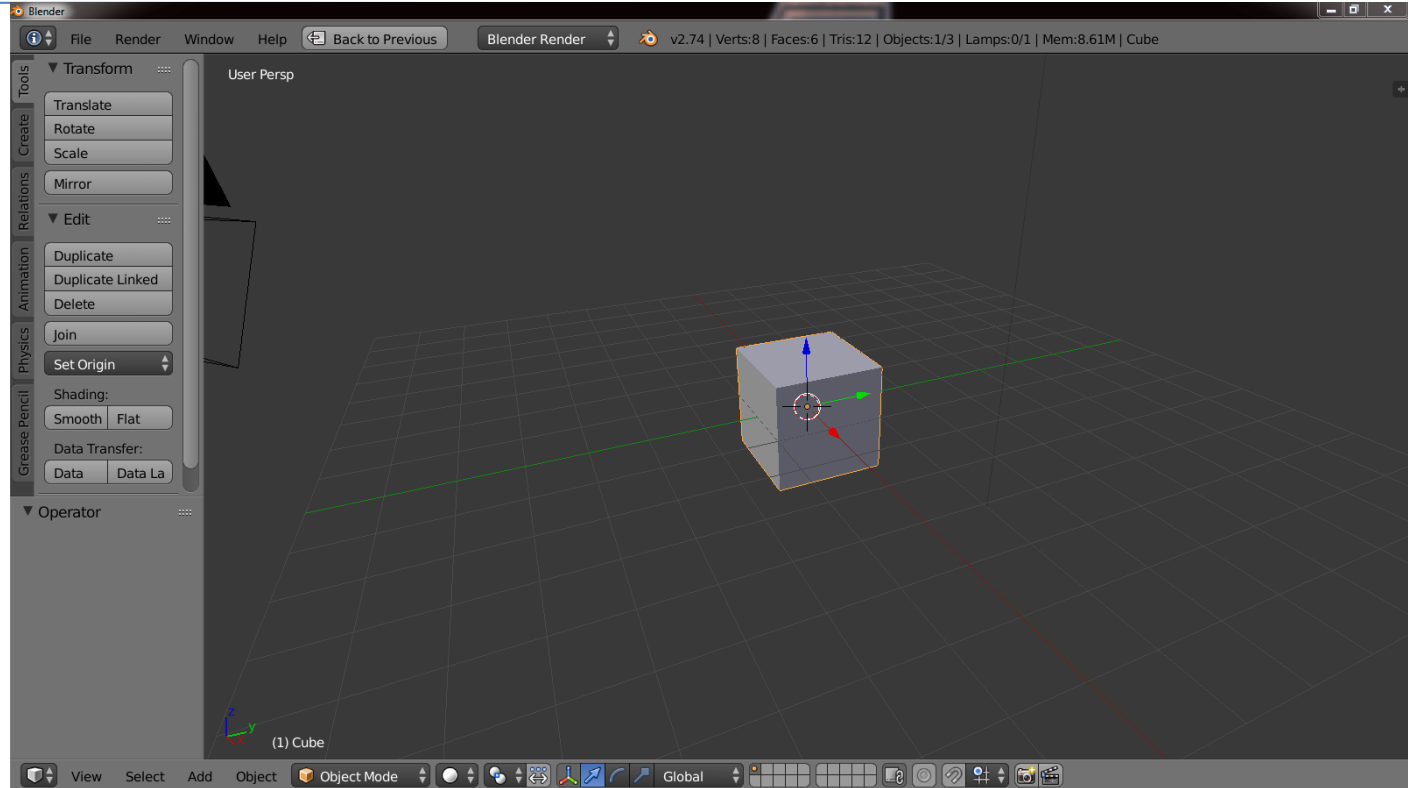
Scroll in, to  
zoom in to 3D  
view window.



# Mouse actions – Scroll button



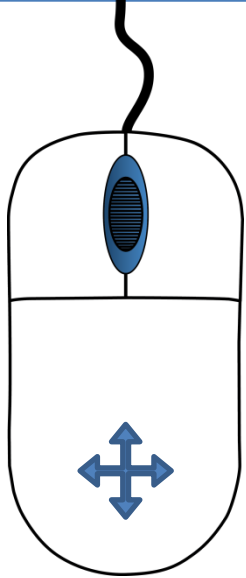
Scroll out, to  
zoom out of 3D  
view window.



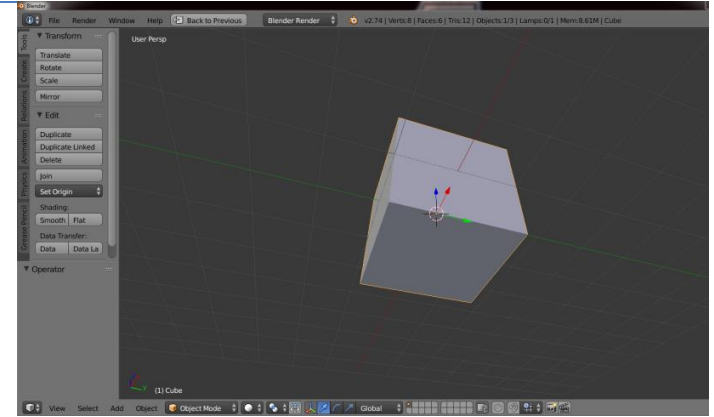
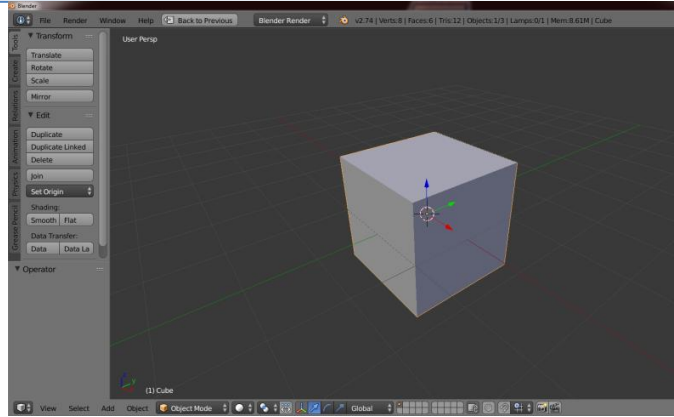
# Mouse actions – Scroll button



IIT BOMBAY

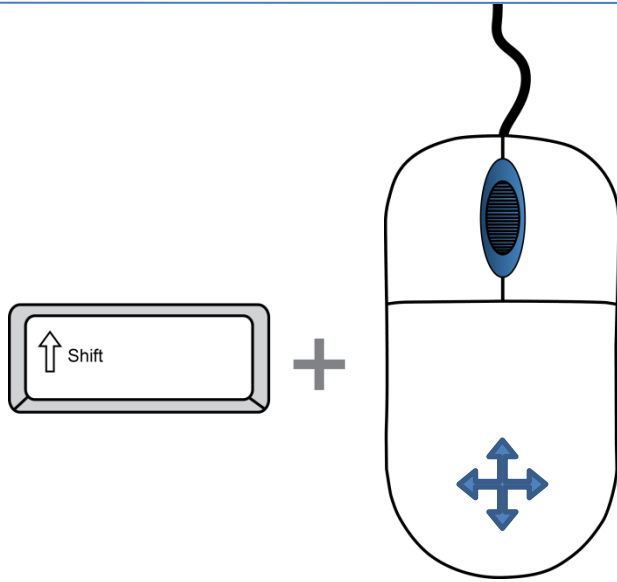


Hold scroll button  
and move mouse  
to orbit 3D view  
window.

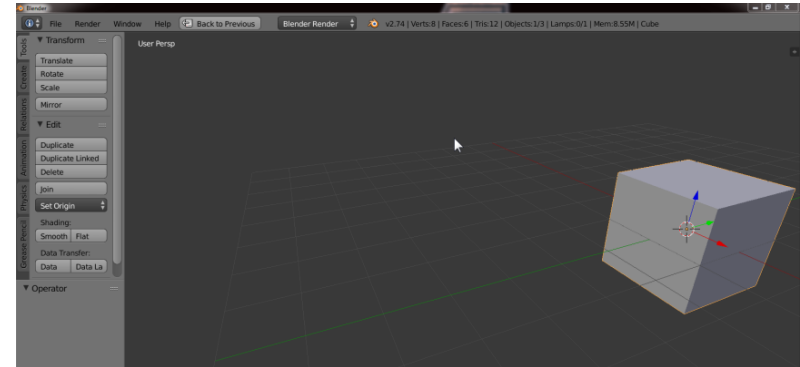
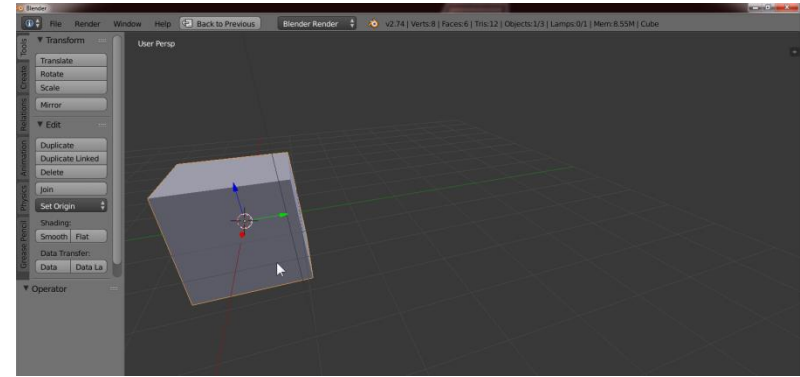




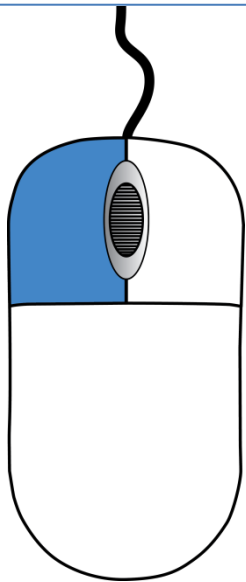
# Mouse actions – Scroll button



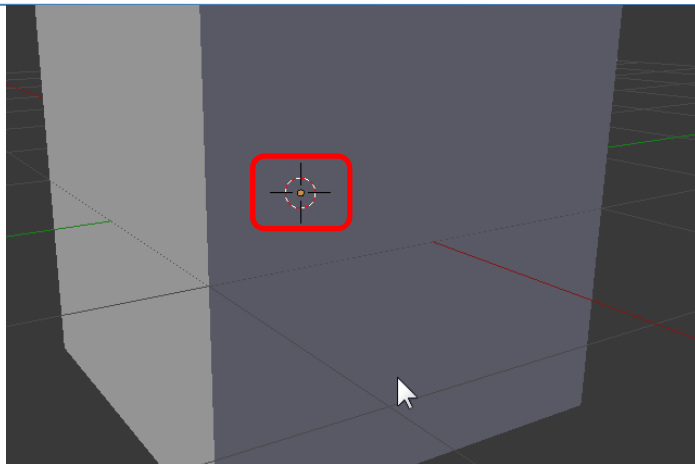
Press Shift and scroll button, and move mouse to pan 3D view window.



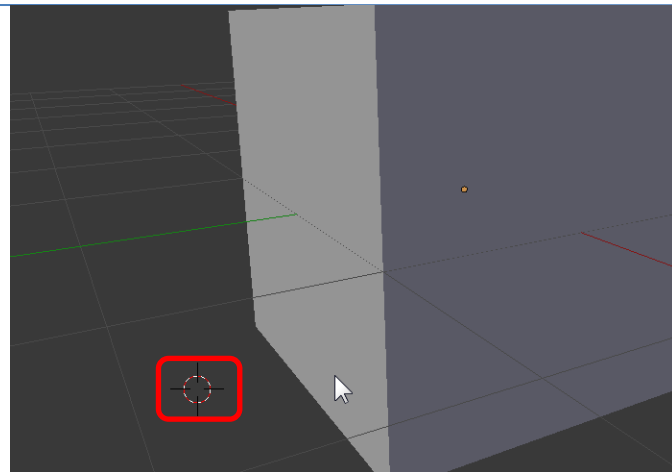
# Mouse actions – Left button



Left click to  
change the position  
of the 3D cursor.



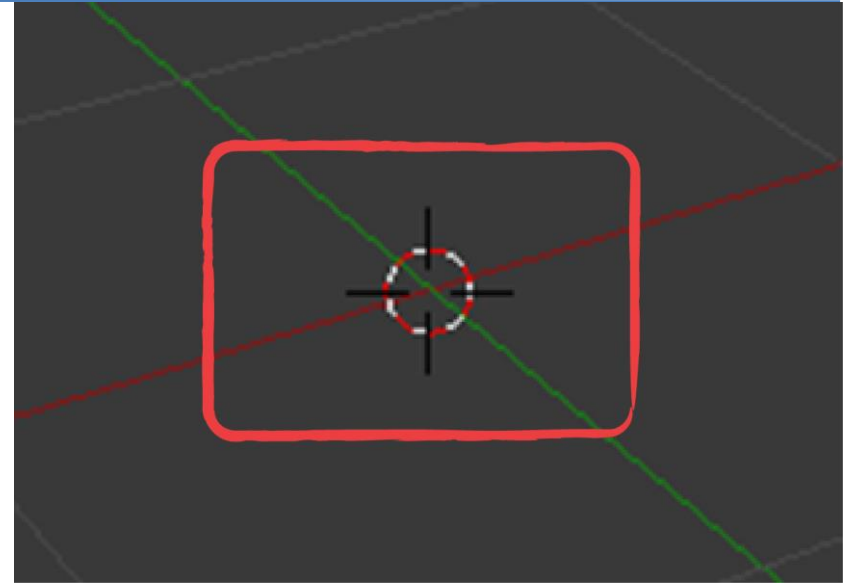
3D cursor at origin



3D cursor at different position

# What is a 3D cursor?

- Provides location to add new object
- Left click changes the position
- Shortcut: Shift + C gets 3D cursor back to origin (center of the grid)



# Mouse actions – Mac OS

	Action	On screen response
Right button	Click	Select object
Scroll button	Scroll in, out, left and right	Orbit 3D view
	Shift + Scroll up, down, left and right	Pan 3D view
	Ctrl + Scroll in	Zoom in
	Ctrl + Scroll out	Zoom out
Left button	Click	Move 3D cursor

# Keyboard shortcuts

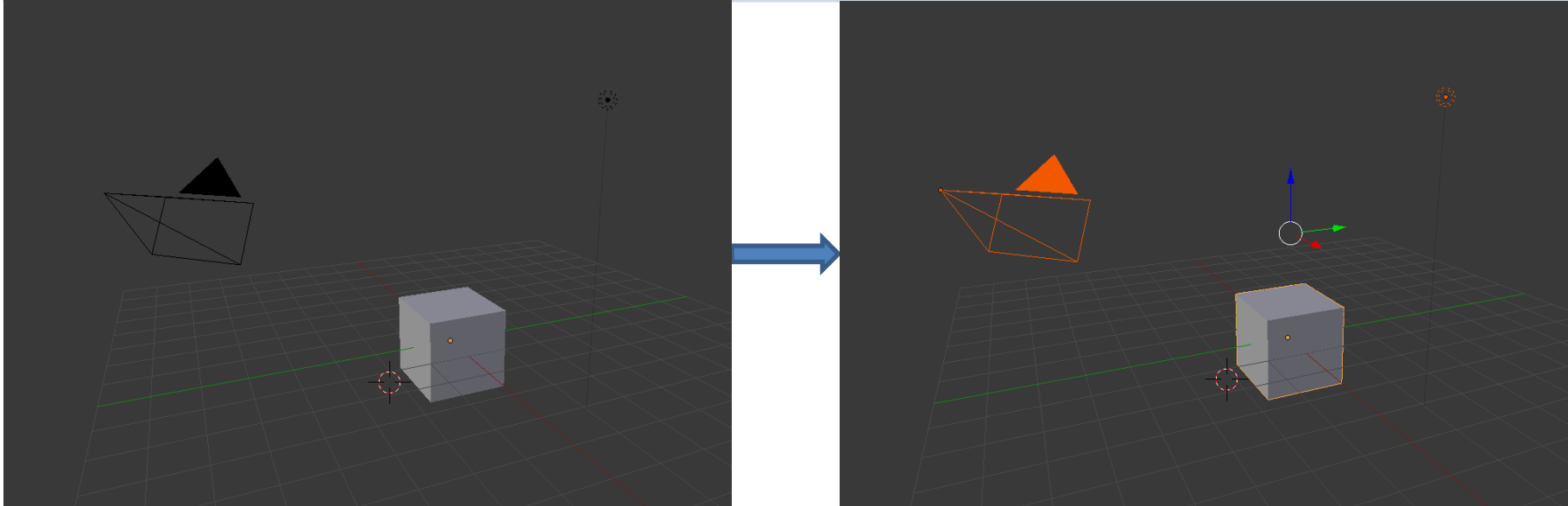
---

# Keyboard shortcuts

Keys	Actions
Shift + C	Get 3D cursor back to origin
A	Toggle to select and deselect all the object
X or Delete	Delete the object
Ctrl + Z	Undo the action

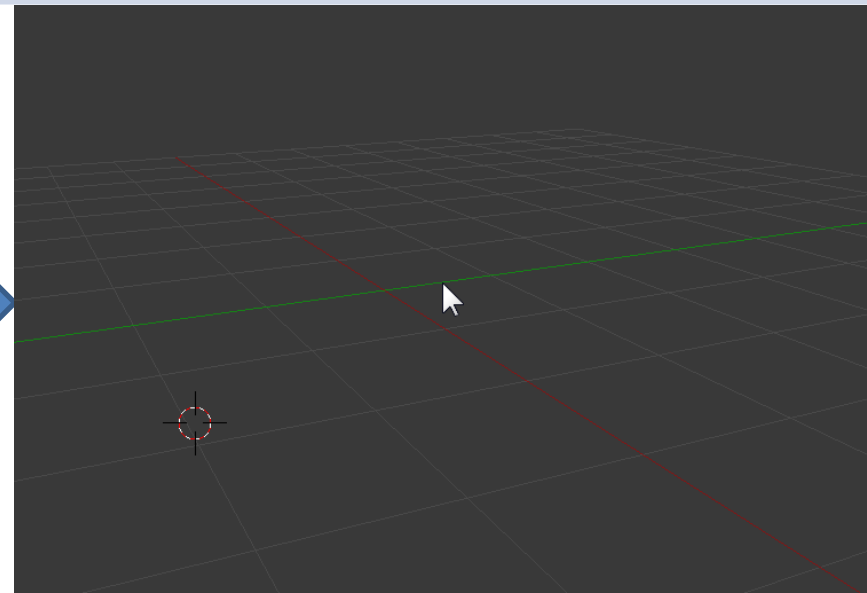
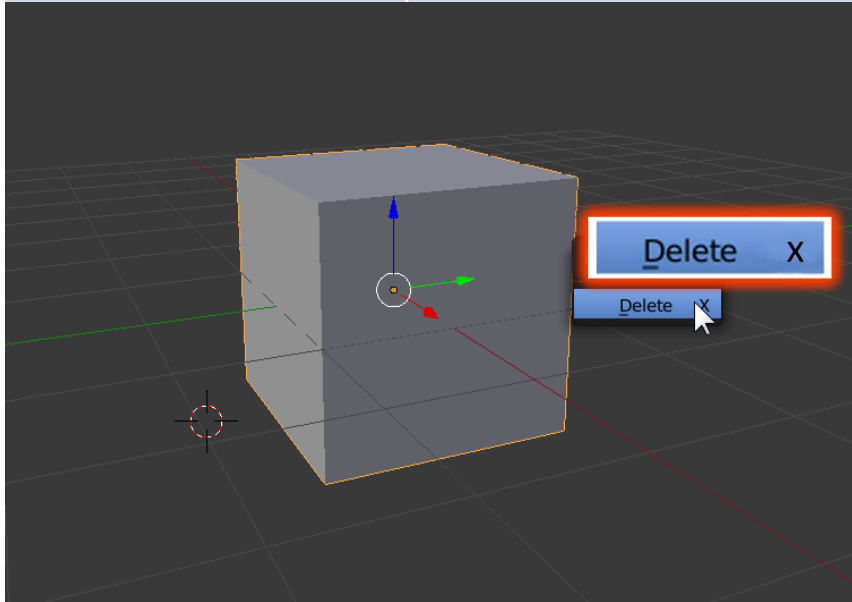
# Keyboard shortcuts

Keys	Actions
A	Toggle to select and deselect all the object



# Keyboard shortcuts

Keys	Actions
X or Delete	Delete the object





# Next session

---

Numpad preferences