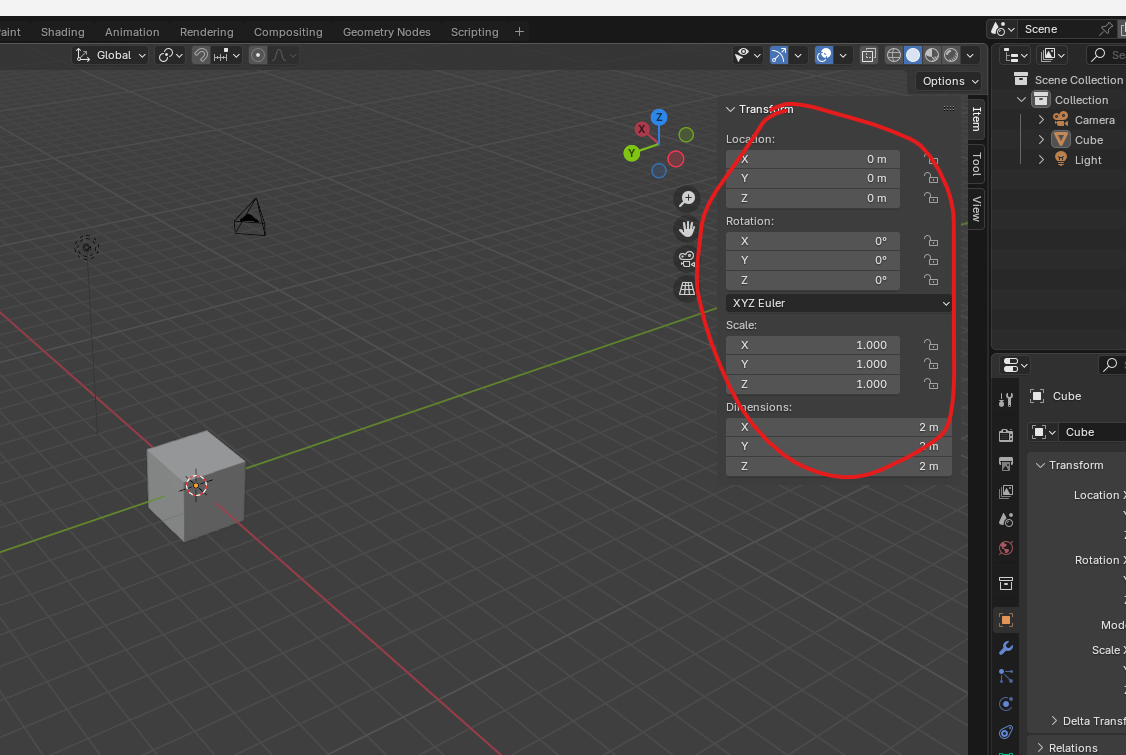
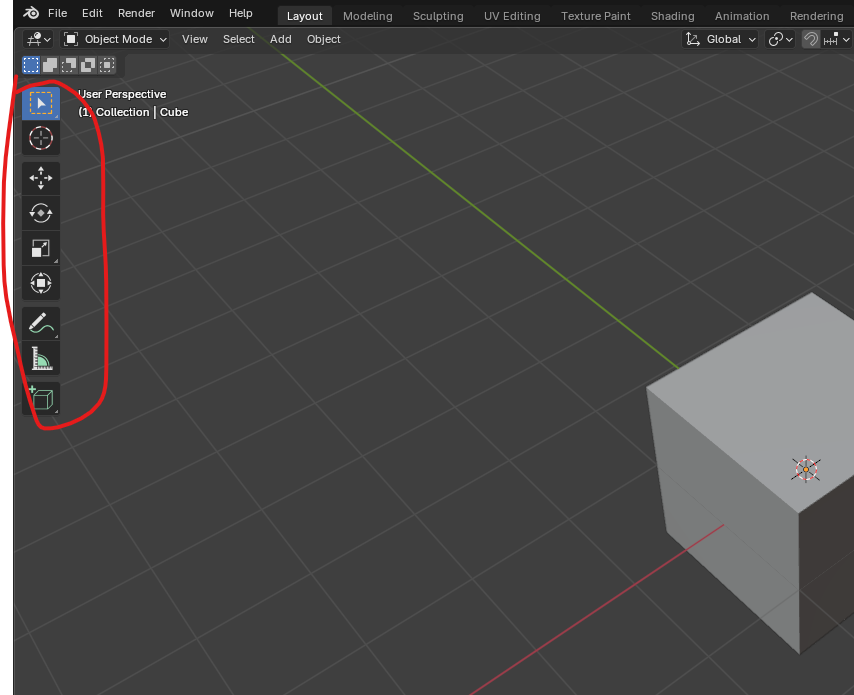
1. there is a **popup panel(sidebar)** in the 3d viewport that you can access by hitting **N** on the keyboard

  
The popup will be as marked above to pull up the sidebar or panel It can be easily accessed

Again press **N** to close

**2.**

If you press **t** key then it toggle on or off the toolbar on the right side as marked below



**to rotate your view in blender**

Simply hold the middle mouse wheel and drag your mouse around to rotate around the or any point you treat as your anchor for moving around(maybe).

**To pan your view around without changing the angle at which you(camera) are viewing an object, simply hold shift and middle drag button in the direction you wish to move**

**To zoom just use the scroll bar to zoom in and out**

**If you do not have mouse scroll then hold ctrl and then hold middle mouse button if you move inward then zoom in of the middle mouse go outward then zoom outward**

**But by scroll it zoom grid by grid but in ctrl + middle way it happens smoothly**

**Numpad 5** helps in switching between orthographic view and projection view

to see the front of your model **press 1 on the numpad**

If you want to see from the right side **press numpad 3**

To see form the top press **numpad 7**

in order to view opposite side you just have to hit control and then press the numpad of the side whose opposite you want to view

Now in outlines to rename any file or folder double click on the file or folder or after selecting press **f2**

To hide an object select it and then press **h** button to hide all the object

And press **alt + h** to unhide all the object

Press **Shift + f3** to convert the active panel to the shader editor

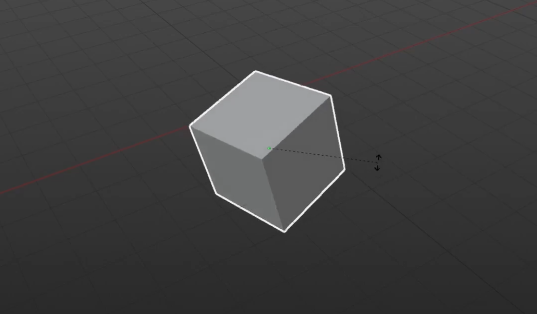
Press **Shift + f5** to convert the active panel to the 3d viewport

You can press the **Shift + f3** again and again to toggle between panels whose shortcut key is Shift + f3 you do similarly for the other shortcut key

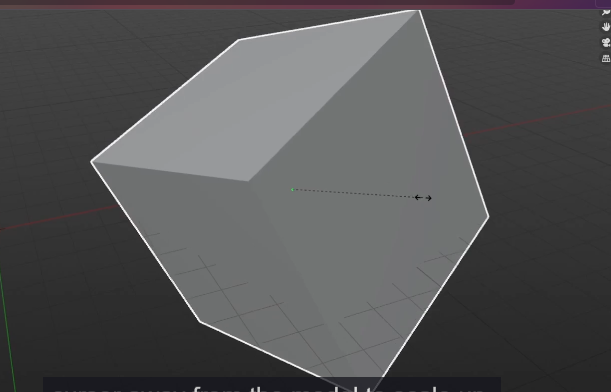
**Ctrl + S** to save the scene or you can say the 3D model you created in file or maybe the file itself(who knows).

So once it's selected press **G** as in grab. And now you can see that when I move my mouse around, the cube moves with it and pointer shape changes to something which I could not record by snip. Very cool to drop the cube into a new location. Simply left click again when it's in the position that you want it. To drop the selection and cancel the operation while you're moving around. After pressing G **right click** and it will snap back to its original position. This right click way can be used in many circumstance where we want to undo something even in any software other than blender.(who knows)

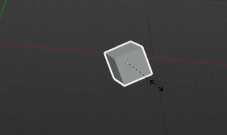
Now to rotate an object then left click on the object that you want to rotate then hit R as in rotate and move the mouse to manipulate the object as shown below and then



left click again to confirm the rotation of the object to scale an object selected by left clicking hit s as in scale and move the cursor away from the model to scale up as shown below



Now move across it towards the object to scale down. As shown below



Once again, left click to confirm the new scale.

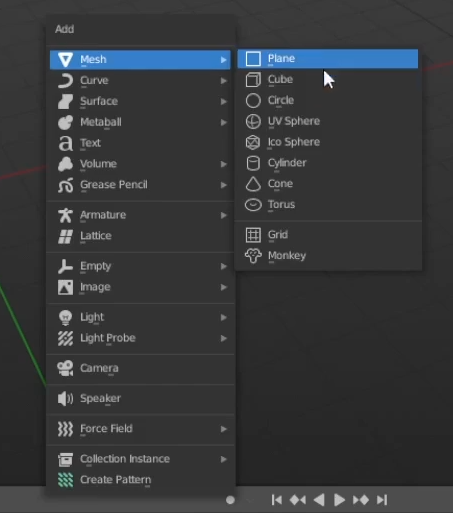
When you add a new primitive object(they are the object that are by predefined by the blender like cube or sphere )

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Note:-**

To create a primitive mesh object press **Shift + a** on any empty space in 3d viewport

And then a submenu will be opened click on mesh and then in next submenu choose any predefined



Mesh object you want

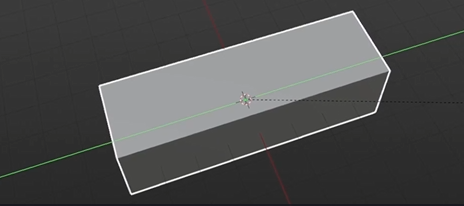
**Note:-**

If we press s by left click then it will scale but you can also give it some value while doing so and whatever numerical value you will type that will be that nx of selected object in all axis

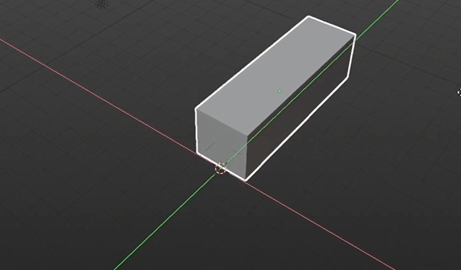
For example you press 2 then the result and object will be 2x

We will often want to move or rotate or scale in only one direction at a time. We can do this by pairing the grab, move and rotate keys with either the **X**, **Y** or **Z** key on the keyboard and depending on the axis

You can also scale, move , rotation along two axes at once and lock the value of the third axis.



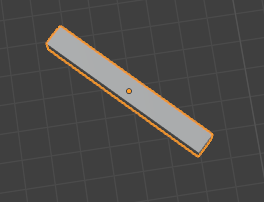
So let's say I wanted to push this box back into the right( right of y axis ), but I didn't want it to lift off the ground at all. The ground being these grid lines here. All I would have to do is with the box selected press G for grab, hold shift and then press Z to lock the Z axis



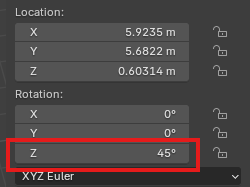
Now you can see its is being moved along x and y plane and leaving Z as shown above So whichever transform operation you want to use plus shift and then the Axis key will lock the values in that direction.

if you need to be really precise about how much you move, something like say you wanted to rotate an object exactly 45 degrees. By pressing first the transform key that we wish let's say are for rotate and then the axis. We wish to rotate it along Z for the Z axis and then simply before we left clicking confirm we just want to type 45. Now this will rotate it exactly 45 degrees from where it was(means if you are in 90 degree then after this you will be 135 degree).

As shown below



Now you can see in sidebar (that we get by N) that in rotation for z 45 is written(as the object was in 0 degree) as shown below

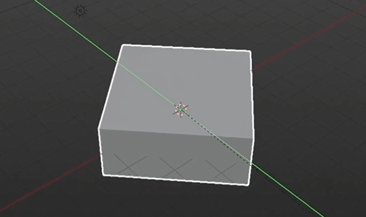


Now when you are typing the number you cannot rotate it more by mouse same for another operation.

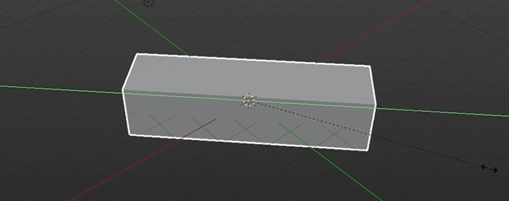
, a much quicker way to switch between local and global space without having to change it from menu. If you want to perform any transform operation in local space, all you have to do is hit the transform hotkey for the operation you want to perform and then double press the axis button.

Example is come back to the global and we will do the operation of scale in terms of local y

When **y** is pressed once

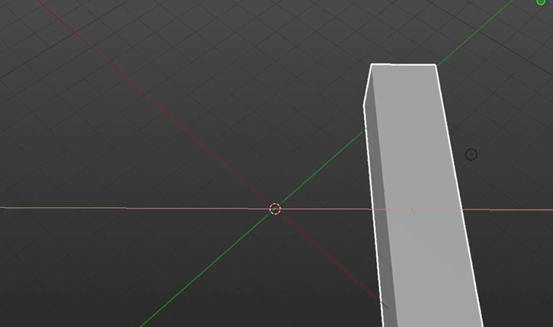


And when **y** is pressed twice



The shortcut works for all transform operations, including move and rotate.

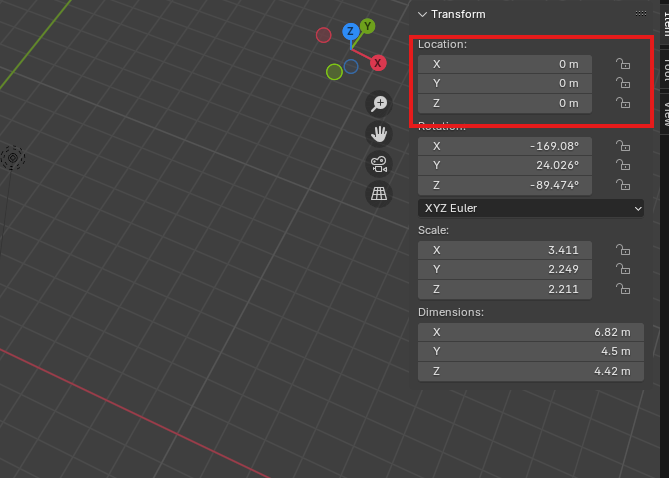
So if I wanted to move this along, it's local access which would be this direction.I would head G for grab x for the x axis and then x again to switch it into local space as shown below



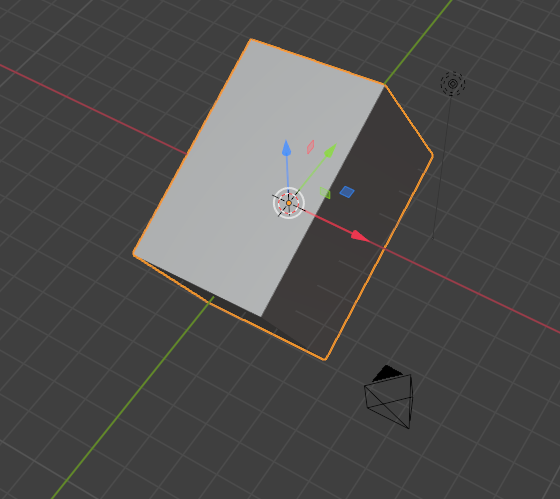
Any of these transfer operations you performed is stored in memory and can be undone using **ctrl + z**.

You can redo any of the undone operations by pressing **ctrl**(maybe right because it is happening in my computer ) and then **shift** and then **Z** and it will redo the operation.

You can quickly clear the transforms by using the alt key combined with the transform operation key.(undo all the particular transformation like move, rotation and scale ). So holding **alt** and pressing **g** will clear the location that is make the values 0 in location in N popup as shown below.

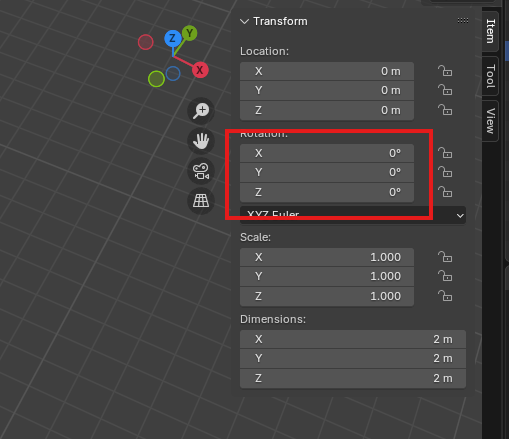


Now mesh is snapped mesh back. So its center point is at 000 on the grid as shown below

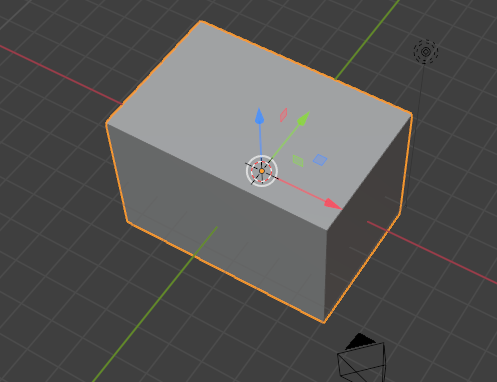


You can also do this with **alt r** for rotation.

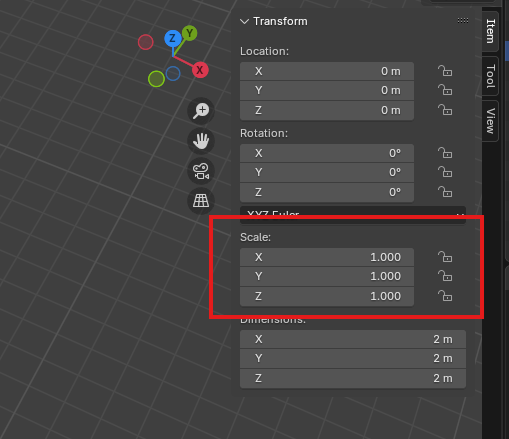
This value has now been reset to zero in rotation section as marked below of **N** popup as shown below



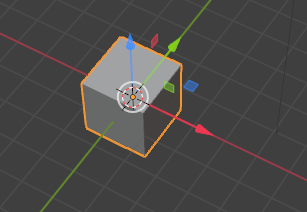
Now our object will look like below



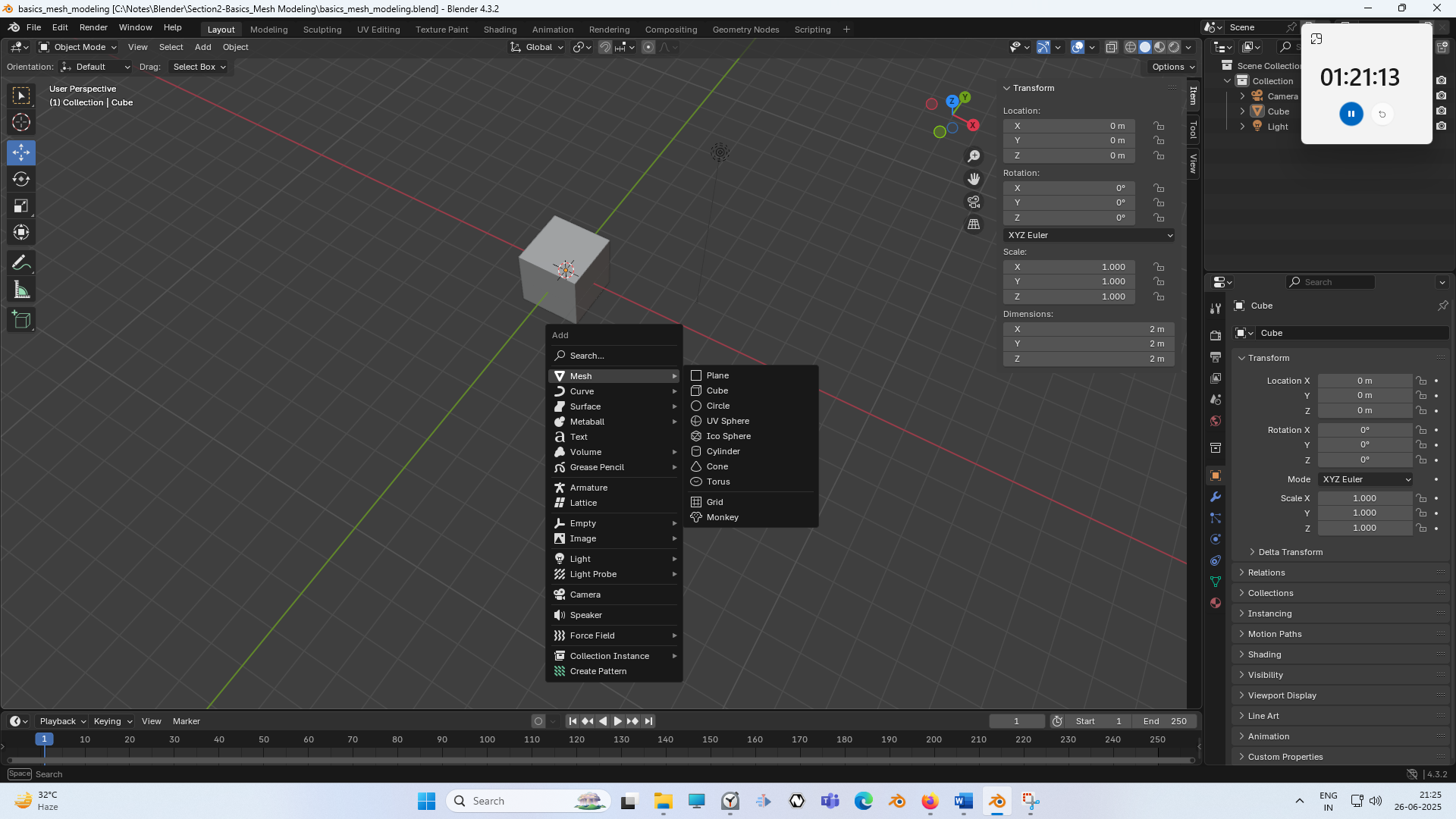
and **alt s** will reset the scale section as marked below in the **N** popup as shown below



Now our object will look like below



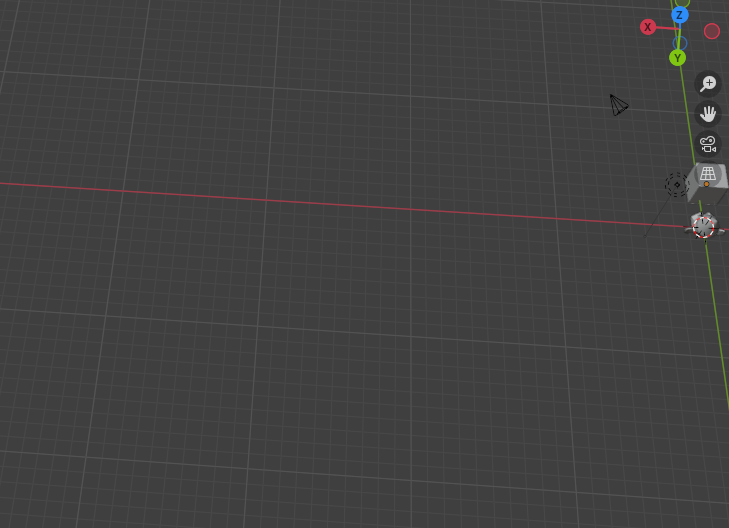
So to add any object to the 3D viewport, simply hold **shift** and then press **A** to bring up the add menu as shown below



So we can move a 3D cursor by holding **shift** in the viewport and **right clicking** anywhere else in the screen to snap the 3D cursor to a new location. ( maybe according to the plain you are seeing from and if right click on that object then it get attached to that area of the object )

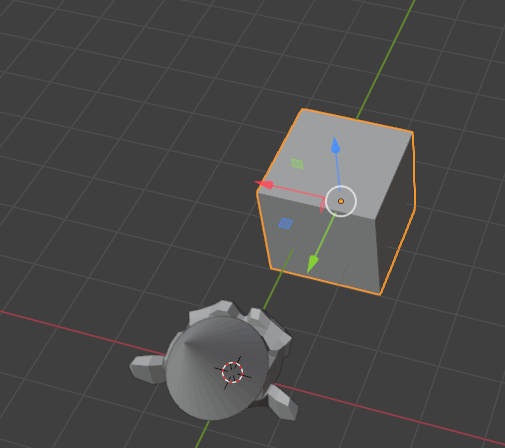
if you've moved the 3D cursor and you want to get it back to the world origin. Exactly. Simply hold **shift** and press **C** on the keyboard. This will snap the 3D cursor back to the origin and also reset the camera's zoom if you are seeing it from far away or very closer so that you'll be focused on the world origin.

This is handy. Sometimes you may accidentally move, you don’t know your view way out and way back like below and you're like, Oh no,I need to get back there(maybe in the centre or of there is any area where there is mesh object (who knows)). Just hold **shift** and press **C** and it'll snap you back to the original.

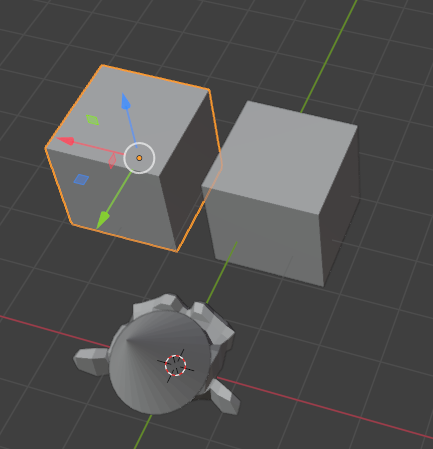


By this way we duplicate the cube in our viewport

**Before duplicating**



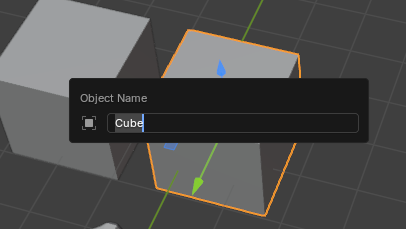
**After duplicating**



Now you can see that after positioning in above we have duplicated the cube as selected above

To rename any mesh object or maybe any object click on the object in the 3D viewport and pressing **f2** on the keyboard which will bring up that same input field as shown below

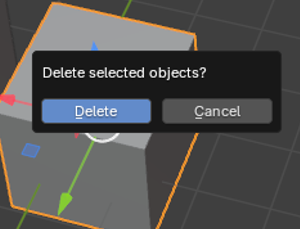
So we select the cube and then press **f2** to rename and now it will look like below



Type the new name for that mesh object that is in this case that is our cube.

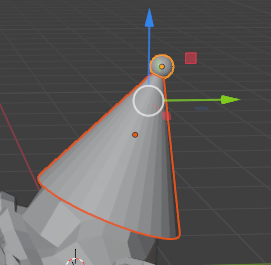
To delete an object selected by left clicking and then either hit **delete** on the keyboard or x which to delete an object selected by left clicking and then either hit delete on the keyboard or press

**x** which will bring up this confirm menu in which there be two option representing delete and another cancel button click on delete button



Note that pressing the **backspace** key does not work for this. It is only the delete key. **X** button is for the deletion after confirmation.

We can click the one object and then press **shift** and click on the other object to multi select it. I have done as you can see below



You can see both of the objects are highlighted if I move then they will move together