Assignmen-03:

SHORT NOTES

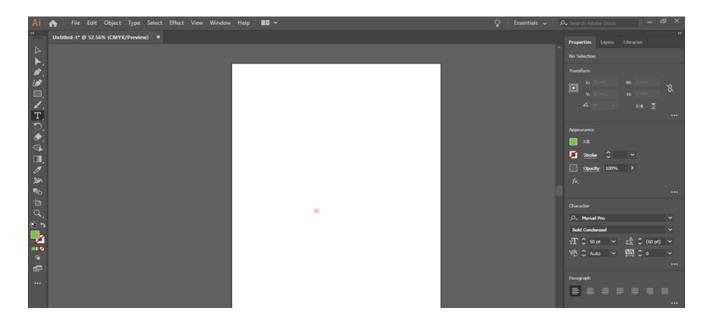
Adobe Illustrator is a vector graphics editor software developed and owned by Adobe Inc. It is used to make drawings, illustrations, artworks and 3D objects for various purposes. Illustrator allows you to transform 2D elements into 3D elements by giving them depth by extrusion or by revolution. It is possible that the preview result on the artboard has some smoothing issues, but the print or output result will still be perfect.

Extrusion:

Extrusion is a process of giving thickness to a 2D feature in the X-Y plane by developing through the Z-axis. Or it is the process of converting a 2D sketch to 3D by adding a certain height. It is the easiest and powerful way of making 3D objects. It is possible to extrude any complex shape or size using the Extrude tool in Illustrator. We can custom decide the length or thickness to be extruded.

Example:

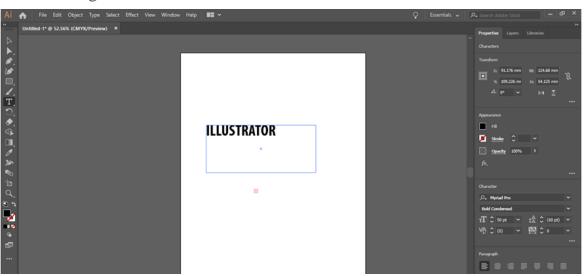
Step 1: Open Adobe Illustrator on your computer and start a new project. Select any of the page size available.



Step 2: The next step is to add your text to be extruded. You can see a vertical toolbar at the left end of the illustrator. All the tools for various effects are given in that toolbox.



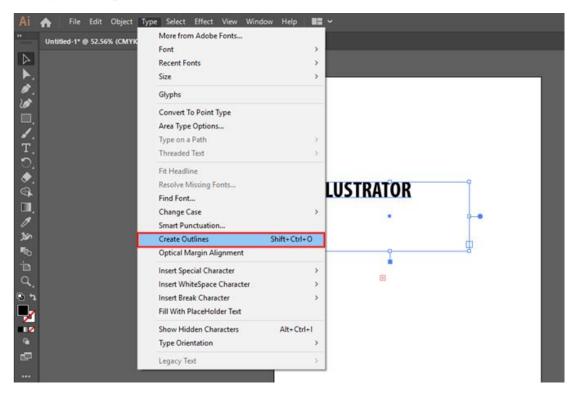
Step 3: Type tool (T) is used to add texts in an illustrator. Select type tool from the toolbar, click and drag a box on the artboard for writing your text. You can write anything as per your need. Here, for example, I used the word "ILLUSTRATOR" for extruding.



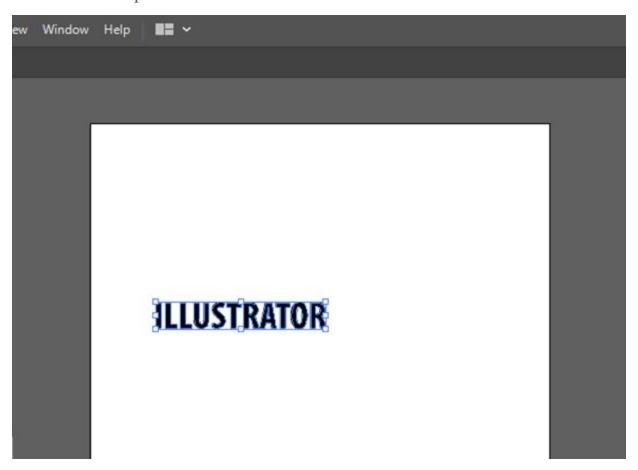
Step 4: Also, you can choose any font for the text as per your requirement. You can edit the size of the text from the character panel. From the window option, you will get the dialog box to change the size of the text. (Window>Type>Character).



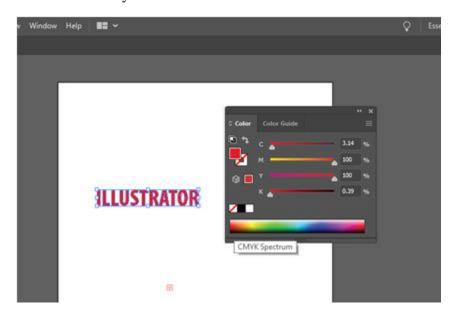
Step 5: To extrude the text, you have to convert the text into shapes so that you can extrude the shape easily. For that, select your text using the selection tool (V), then go to Type> Create Outlines.



Step 6: Then, an outline will be created around your text. This shows your text is converted to shape.

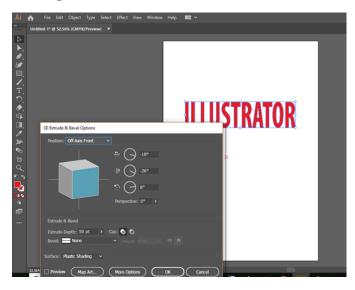


Step 7: Another effect you can add to your text is to give color. You can choose any color from the list and add it to your text. Open the color panel from a window and choose any color.

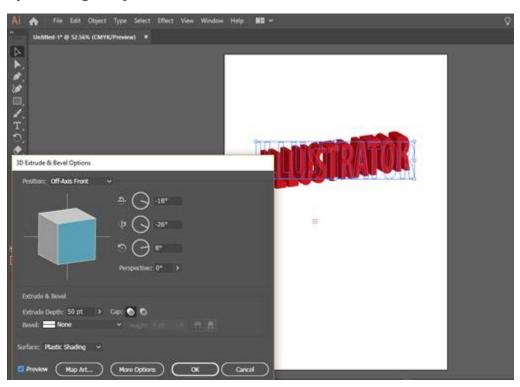


Step 8: Before converting the text into 3D, make this into a group. So that the letters stay as one shape even after applying effects, group the text by choosing Object > Group.

Step 9: To apply the 3D effect, select your text and go to Effect>3D>Extrude and Bevel, which will open a dialog box. It contains various options to edit the extrusion, which includes extruding depth, position, perspective, Bevel, etc. In the dialog box, you can see a box to enter extrude depth. Type your required value for the depth.



Step 10: In the 3D dialog box, you can see how your text will look after extrusion by clicking the preview button.



When you look at the extruded text, you can see that it is not within the perspective. To fix this, you can change the value of perspective from the extrude dialogue box.

Revolution:

Revolution in design is the process of creating a 3D object by rotating a 2D sketch around an axis. Or it is the process of giving thickness to a 2D sketch by revolving the sketch around the center axis. Revolve tool is also as important as extruding. Mostly cylindrical and hollow objects are created by using revolve tool in illustrator. After creating the volume, it is possible to vary the angles as is the case with extruded volumes.

To create a 3D volume in revolution, first draw half of an object, then choose in the menu **EFFECTS / 3D / REVOLUTION.** In the Revolve Options window, in the Revolve section, choose left edge or right edge, depending on the path you produced.

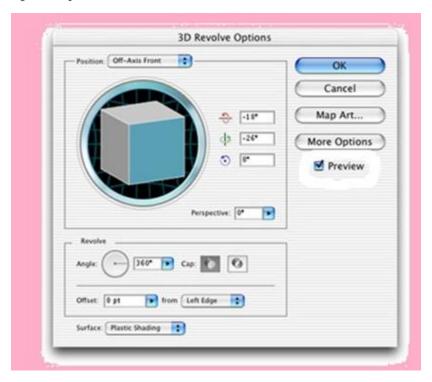
Step 1: Open Adobe Illustrator and select a new page for designing. The first step in this process is to draw a profile of the bottle to revolve. For that, you have to draw the half portion of the bottle using a pen tool. Select the pen tool and draw a half profile.



Step 2: After the first step, you have to determine the axis of rotation. And you have to select the plane and edge to be revolved. Select this using selection tool.



Step 3: After finishing the drawing, select the drawing and go to the revolve option from the effects menu. Effects>3D>Revolve. Then a dialogue box will be opened with various options for revolving the drawing. It is the 3D revolve options; using this; you can change various parameters of revolve. By clicking on the preview option, you can see the revolved bottle on the screen.



Step 4: Here, using these revolve options, you can fix the degrees to rotate, thickness, offset, etc. Also, by rotating the cube, you can see different views of your 3D object.

