

## Experiment -01

### Create a basic texture in an image editing software, like Adobe Photoshop

Step1: Go to Google ->download a Brick image

Step2: Go to Adobe Photoshop

Step3: Click on File->New->Create

Step4: Go to File->Open->Select the brick image->open

Step5: On the Layer Panel->unlock the layer

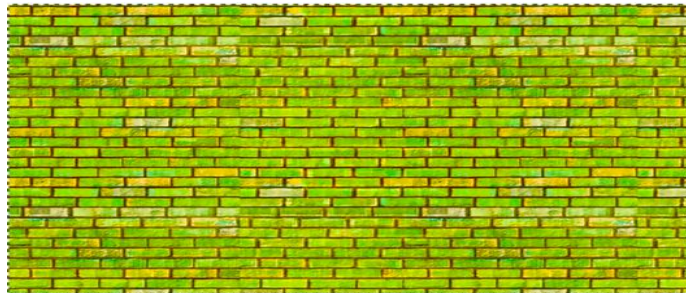
Step6: Go to Edit->Define pattern->Give a name for the pattern->Ok

Step7: Go to new canvas->use Brush tool to draw any shape Or Draw any shape using Shape tool [Triangle, Rectangle, and Circle]

Step8: Go to Paint Bucket Tool in the properties->under pattern panel select the pattern click on create

Step9: Fill the Pattern in the shape draw by clicking on it

Step10: Save the file in your located folder



## Experiment -02

### Experiment with different camera movements

Step1: Open Autodesk Maya Software

Step2: Click on new->Create

Step3: Go to Poly modeling->Cube and scale it[R]

Step4: Go to Curves->select 3 point circle arc

Step5: Press space and select top view

Step6: Click on 3 point and adjust it

Step7: Repeat the step 6 and adjust the point

Step8: Adjust the circle [By clicking W]

Step9: Go to Rendering-> select camera and place it near cube

Step10: Select camera and circle select Animation [Under menu sit]

Step11: Click on Constrain->Motion Path->Attach to motion path->click Attach on window

Step12: Go to attribute editor panel [on right] click on motion path->click for inverse front

Step13: Under panel menu->Perspective->camera1

Step14: Select frame 1 and more

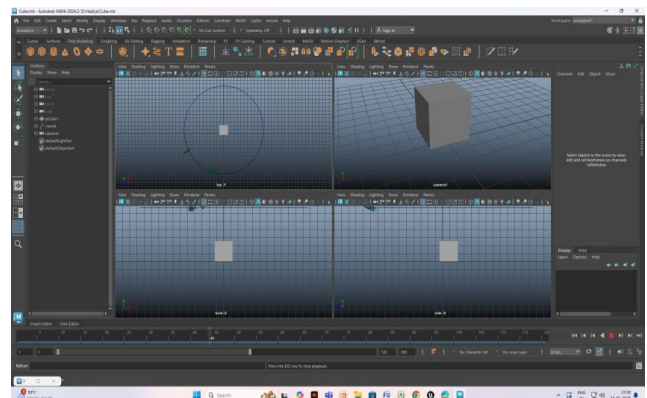
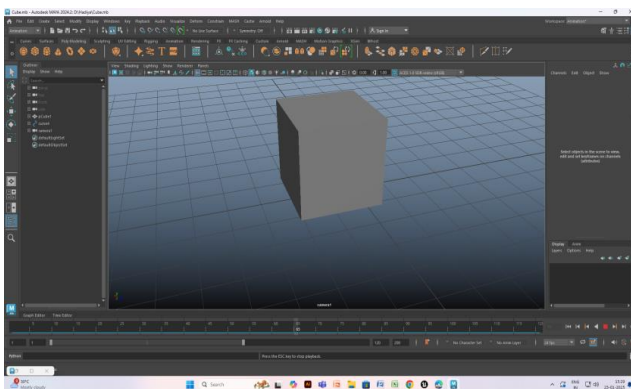
Step15: Set frame form 1 to 120

Step16: Set->front twist=-30->right click->set key

Step17: Go to panel->perspective->perspagaint set front twist=0

Step18: Go to panel->perspective->Camera 1

Step19: Run the project and save file in your located folder



## Experiment -03

**Types of light sources commonly used in 3D, such as point lights, directional lights, spotlights, and area lights.**

Step1: Open Autodesk Maya Software

Step2: Click on new->Create

Step3: Go to Poly modeling->polygon plane and adjust it

Step4: Right click on Super Shape->Ultra shape

Step5: Go to Attributer->poly super history->random

Step6: Repeat the step 3 and 4 to add another object

Step7: Go to create->light->spot light

Step8: Press space bar->go to top -y view and adjust the light in middle of both objects

Step9: Click on panels->look through selected

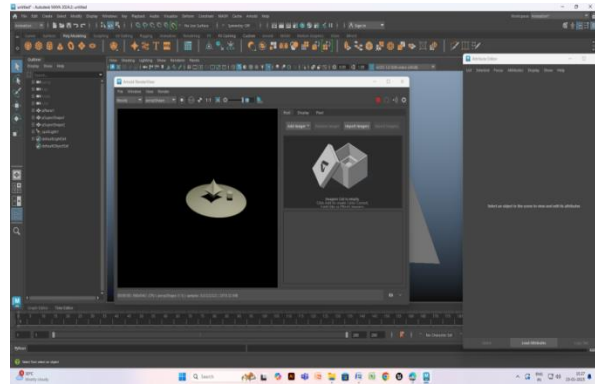
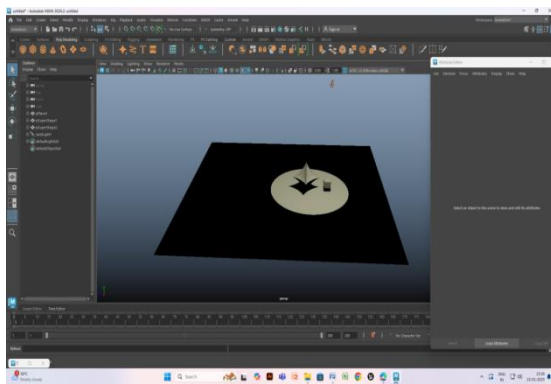
Step10: Than click->use all lights

Step11: Go to Arnold->Render view the output

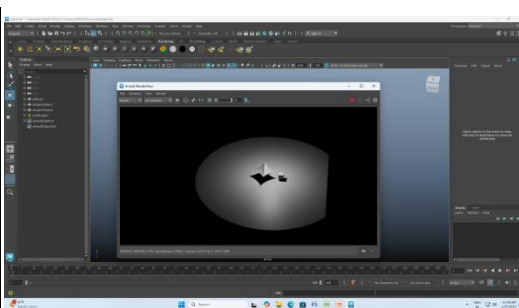
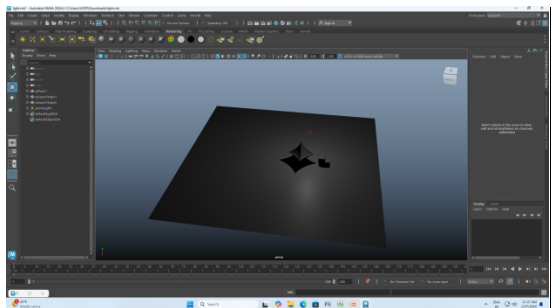
Step12: Save the file in your located folder

**Note: Repeat the above steps for point lights, directional lights and area lights.**

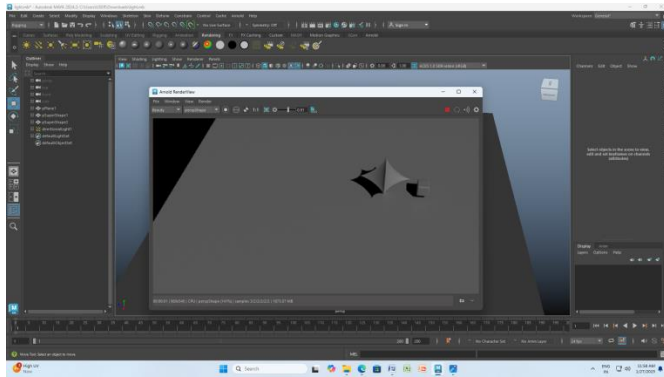
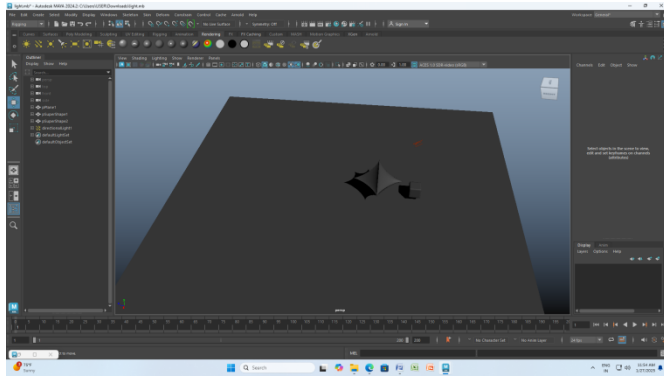
**Spot Light:**



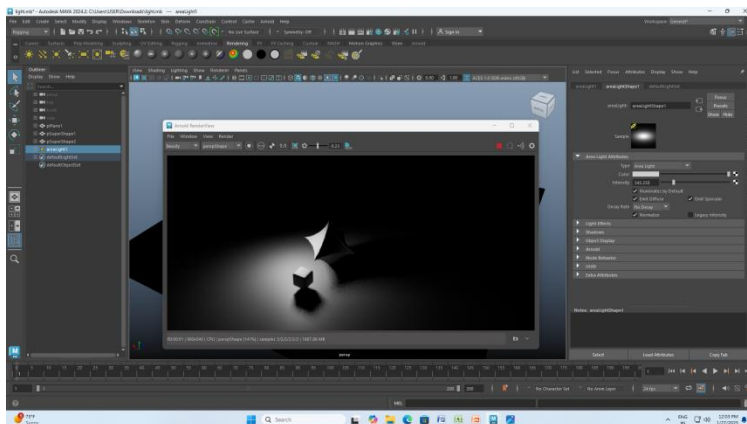
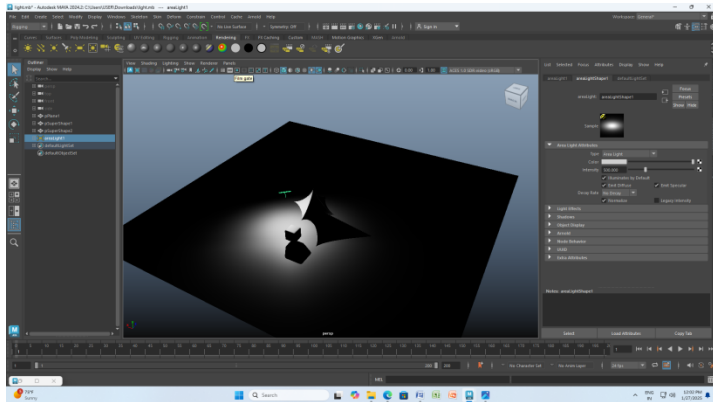
**Point lights**



## Directional lights



## Area lights



## Experiment -04

**Experiment with adjusting the overall intensity of the lighting to brighten or darken the scene.**

Step1:- Open Autodesk Maya software

Step2:- Click on new->create

Step3:- Go to poly modeling->select plane ->and adjust the plane

Step4:- Go to poly modeling->select any two objects and adjust it

Step5:- Go to create ->click on lights -> select the any one light and adjust the light

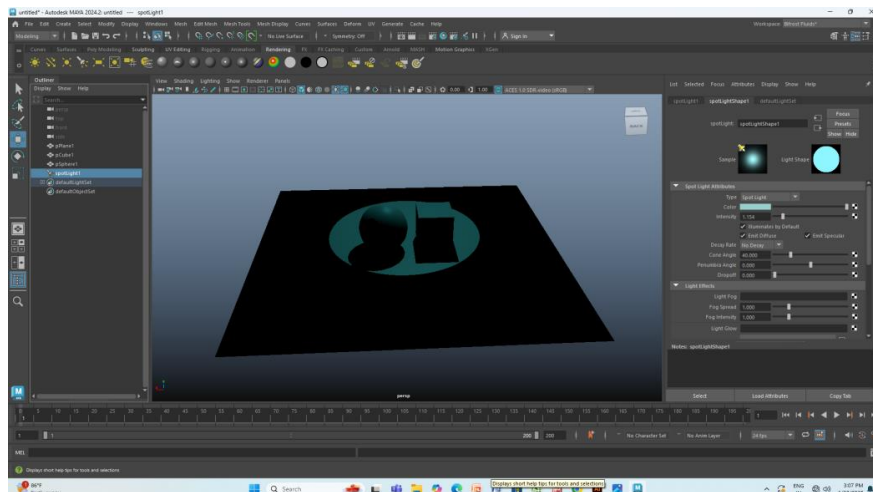
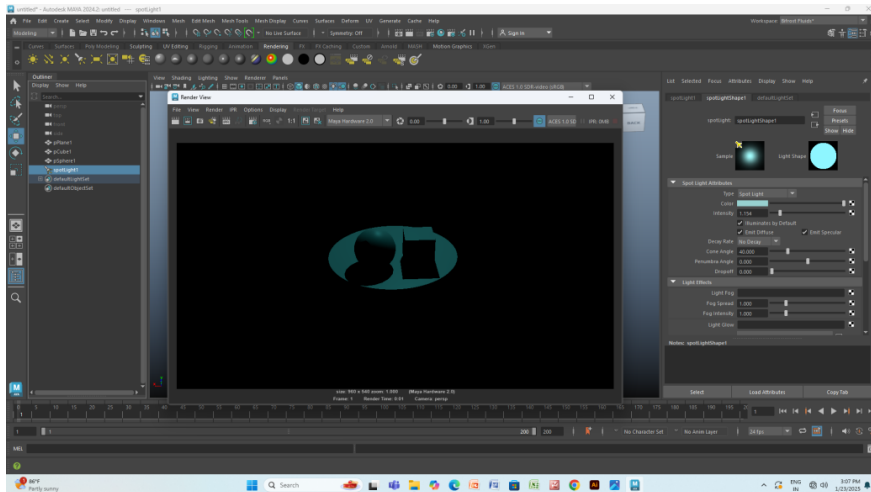
Step6:- Select the lights ->go to attribute editor and increase or decrease the intensity

Step7:- Click on color and choose any one color and color it

Step8:- Go to menu bar->select Arnold ->and click on render

Step9:- View the output

Step10:- Save the file in your located folder



## Experiment: 5

### Create a new spot light in your 3D software

Step 1: Open Autodesk Maya software

Step2: Click on new file

Step3: Select the object-> polygon plane and scale it.

Step4: Go to Create> Click on light-> Select Spot light Move (w) the light ->scale it by pressing (R)

Step5: Click on use all light -> rotates the spot light and place it in correct position

Step6: Click on spotlight -> go to attribute Editor ->Arnold and give samples (2) ->exposure (13) or (12) enter

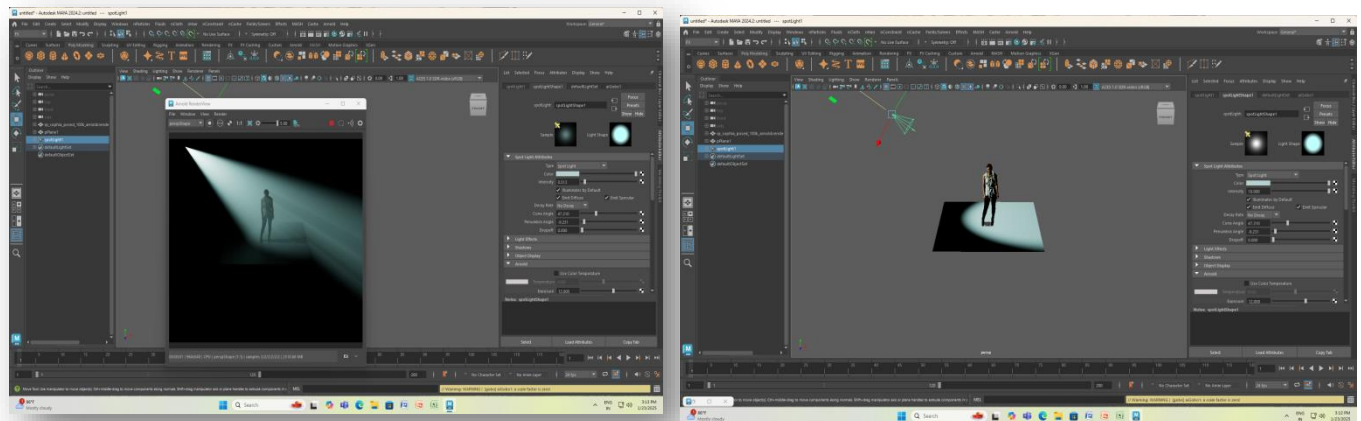
Step7: Go to windows click on rendering editor->render setting ->Arnold renders->click on environment-> Right click on atmosphere->select create AI Atmosphere volume

Step8: Change the density (0.060)->anisotropy (0.289)

Step9: Click on spot light->go light filters->click on Add GOBO ->press enter

Step10: Go to spot light attributes select the color->change the cone angle

Step11: Save the file in your located folder



## Experiment no: 06

## Create light optical effects, such as lens flares or light streaks

## Step 1: Open Autodesk Maya Software

## Step2: Open new file

Step3: Go to create -> Lights->Select Point Light

Step4: Go to windows -> Rendering Editors->Select Render Setting->Render using -> Select Maya Software

Step5: Go to Attribute Editor -> Select Light Effects -> Click on Light Glow file

Step6: Select Lens Flare -> Click on Render view

Step7: [You can change the Glow Type, Halo Type, Star Point and Rotation]

Step8: Save the file in your located folder

