আন্তর্জাতিক ইসলামী বিশ্ববিদ্যালয় চট্টগ্রাম

International Islamic University Chittagong

Department Of Computer Science & Engineering

Course Code : ME-2412

Course Title : Engineering Drawing Lab

Submitted to

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Designation : Adjunct Faculty

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Submitted by :

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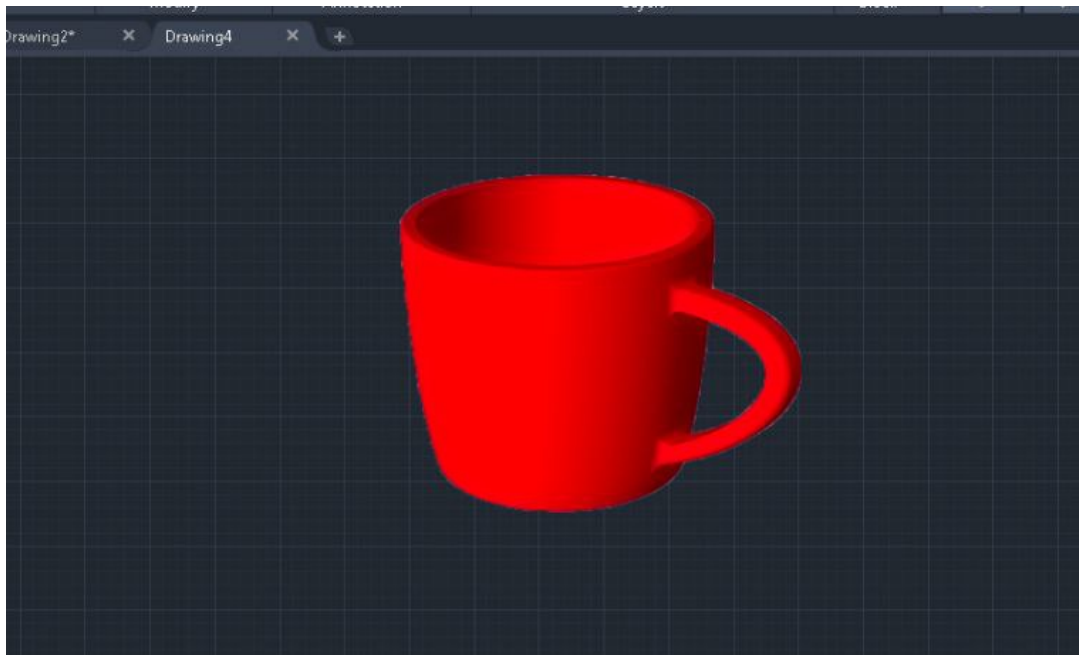
Semester : 4th

Section : 4BF

Mug Design

1. *Set up the workspace:* • Launch AutoCAD and create a new drawing. • Choose the appropriate units and drawing settings for your project.

2. *Sketch the mug's profile:* • Begin by drawing the mug's profile outline using basic 2D drawing commands like lines, arcs, and circles. • Consider the shape and proportions of the mug, including the handle if applicable.

3. *Create the mug's 3D shape:* • Extrude the 2D profile to give it depth and convert it into a 3D solid. • Use the "EXTRUDE" command and specify the height or thickness of the mug.

 4. *Add details and features:* • Use various 3D modeling commands to add details like ridges, patterns, or logos to the mug's surface. • I can use commands like "REVOLVE," "SWEEP," "LOFT," or "EXTRUDE" to create these features.

5. *Design the handle:* • Determine the shape and placement of the handle. • Create a separate 2D profile for the handle and extrude or sweep it to form the 3D handle shape. • Ensure the handle is properly attached to the mug.

6. *Refine the design:* • Review the 3D model and make any necessary adjustments to the overall shape, proportions, or details. • Use commands like "MOVE," "ROTATE," or "SCALE" to modify the model as needed.

7. *Apply materials and textures:* • Assign appropriate materials and textures to the mug's surfaces to give it a realistic appearance. • Utilize AutoCAD's material library or create custom materials.

8. *Render the 3D model:* • Set up the rendering environment in AutoCAD. • Configure lighting, background, and camera settings for the desired effect. • Use the rendering engine to generate a high-quality image or animation of the 3D mug.

9. Document and present the design

Design of a MUG:

Designing a 3D table

1)1st step: Initially,i set the " 3D Modelling " from setting menu.

2)2nd step: Next i draw a rectangle from draw menu.

3)3rd step:I have selected whole table and the leg and typed joint and press enter so that it become one object.

4)4th step:i have selected "Line" from "Draw" and created on table leg.

5)5th step:i have selected the leg object and create 4 copies from "Modify" object.

6)6th step:Next,i have selected "Move" option from "Modify" & select & move to its legs to its appropriate position .

7)7th step:i have selected "orbit" option & checked if it is okay or not.
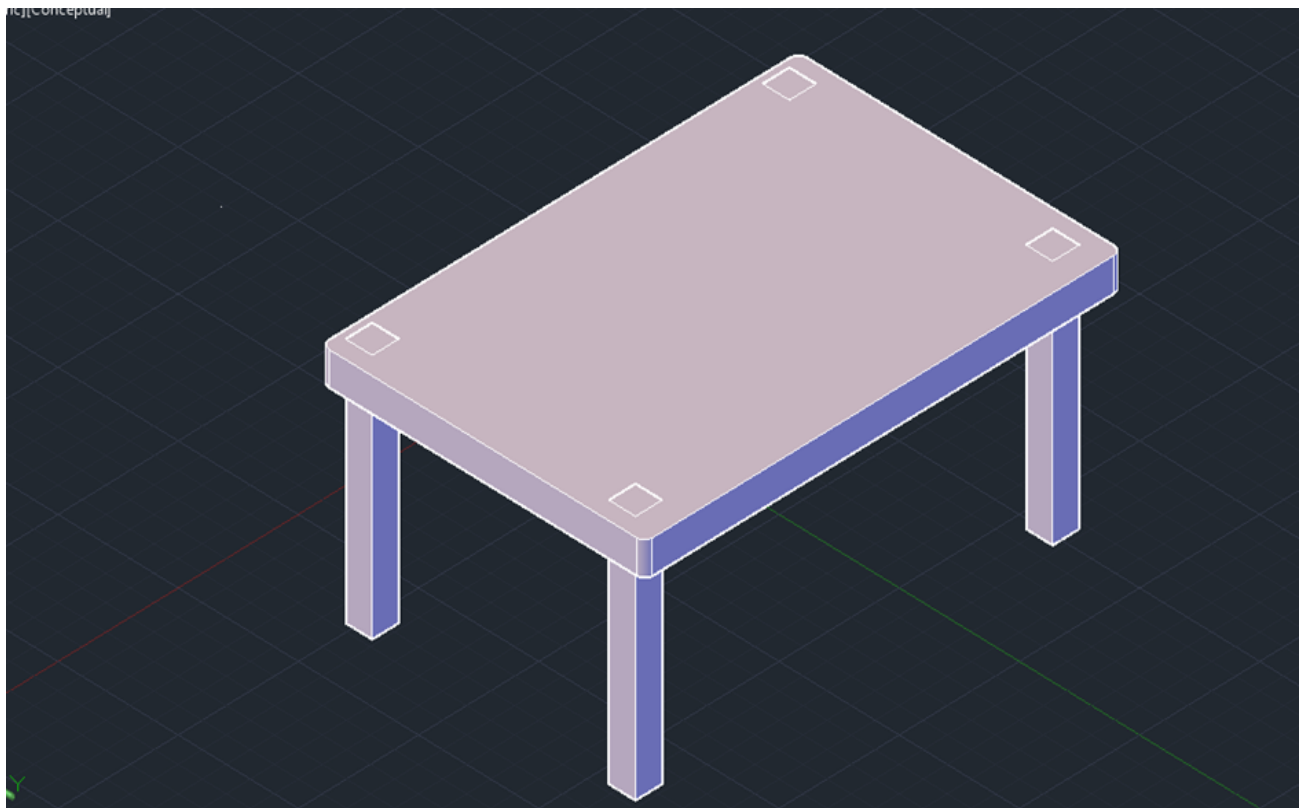
8)8th step:Typed the fillet command and smooth the upper porting of the table .

9)9th step:Then it is the time to colour my table with pretty pinky purple colour so i have selected to the "Visualize" from menu bar and select "material browser" from "Material" option.

10)10th step: After finishing task.its time to .dwg to pdf form.For this I have entered ctrl+p from keyboard

Prepare a presentation or layout to showcase the 3D table design:

Designing of a 3D table

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