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Chapter1

Introduction

1.1 Introduction

My project report is about a 3d house plan and modeling. Firstly I've created the 2d floor plan for my house. And then in 3d mode I extruded the walls and then attached the window and door. And then I've copied the floor and extended the upper floors. And finally the roof was created.

1.2 Design Goals/Objective

Firstly, I took two horizontal and vertical lines and then I've used the offset tool to make the diameter of the room as you can see in figure 1. Then I've created the rooms shape using trimming the extra offset lines. When my 2d drawing is completed then I converted it into a 3D model and drew the doors and windows. And now my drawing is almost completed all I have to do is copy the full floor and place in on top of another one. In this process I made a 5 floor building.

Chapter2

Design/Development/Implementation of the Project

2.1 Section (Apartment House)

- Line
- Offset
- Rectangle
- Subtract
- Trim
- Extrude
- 3d cut
- 3d rotate
- Erase
- Union
- Join
- Border
- Presspull
- Material (Concrete)
- Poly line

2.1.1 Subsection

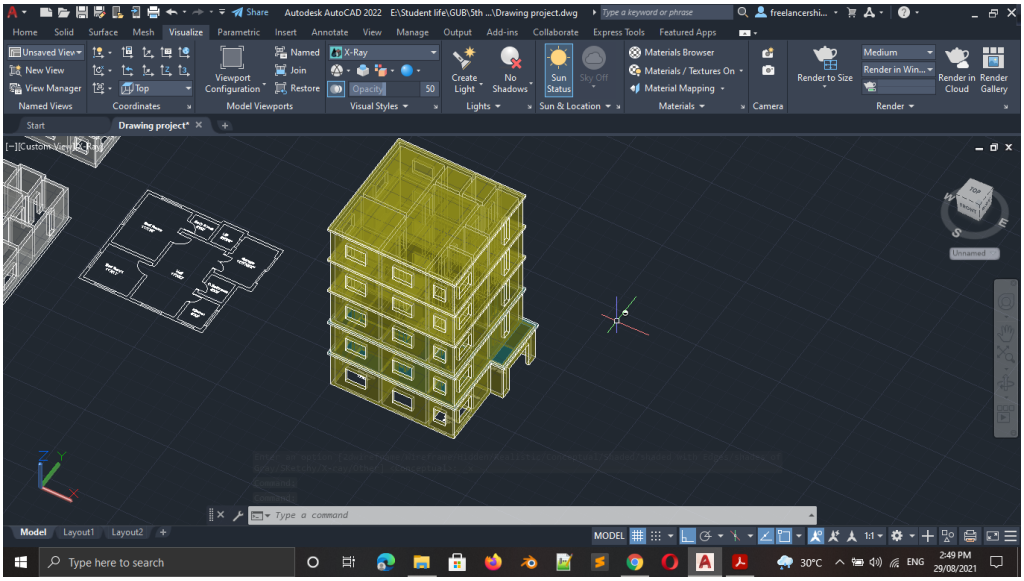

Figure2.1: Apartment Design

Chapter3

Performance Evaluation

3.1 SimulationEnvironment/SimulationProcedure

Firstly I've selected the line tool and drew a big vertical and horizontal line for reference, then I used the offset tool and from the reference line I measured the house height and Wight and created it with the offset tool. As you can see in figure 1. Then I selected the trim option and for the room's shape. I shaped the room using trimming the extra lines. After I've created all the rooms I've created a rectangle along the border of my design using poly-line tool for the roof. And now joined the full drawing and extruded upside as you can see in Figure 2. Then I've created the window and door. For upper part of the door I've created the rectangle tool and extruded 3' from selling. When I successfully created the floor I've placed the roof on top of the floor design. And then I copied the whole thing and placed it on top of the roof. I've repeaded the same process 4 times and now my drawing is completed.

3.2 ResultsandDiscussions

3.2.1 Results

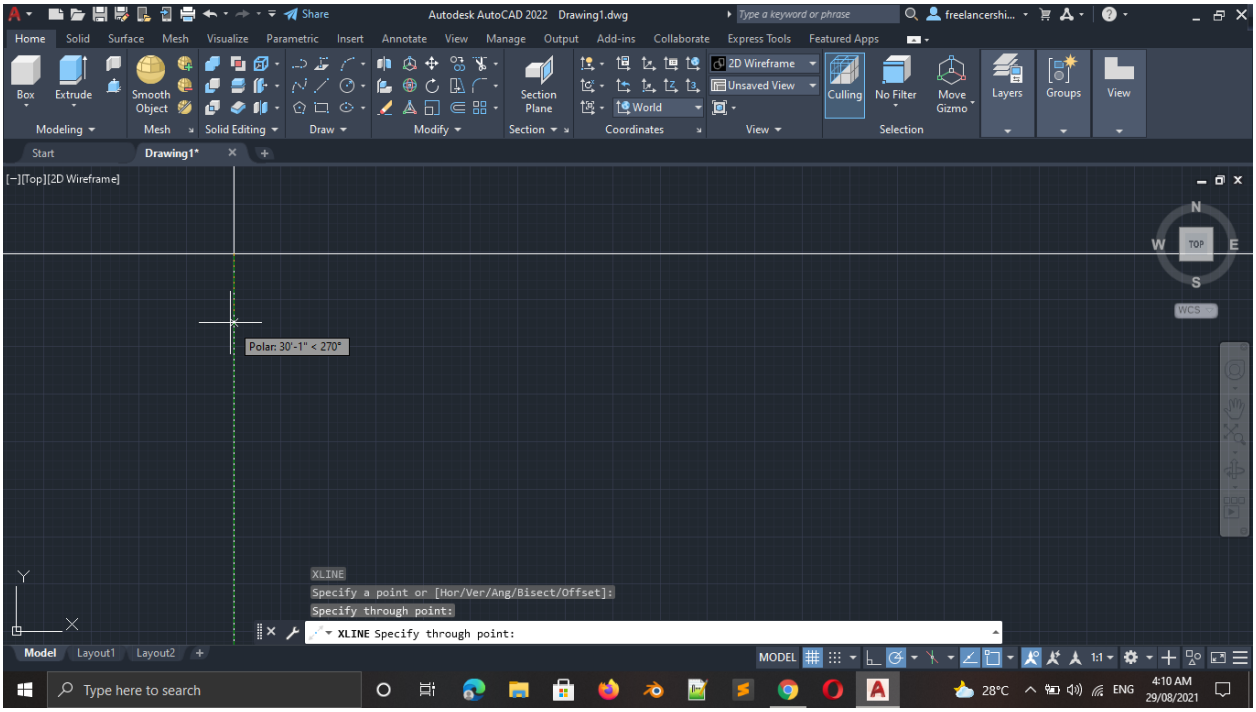

Figure 1

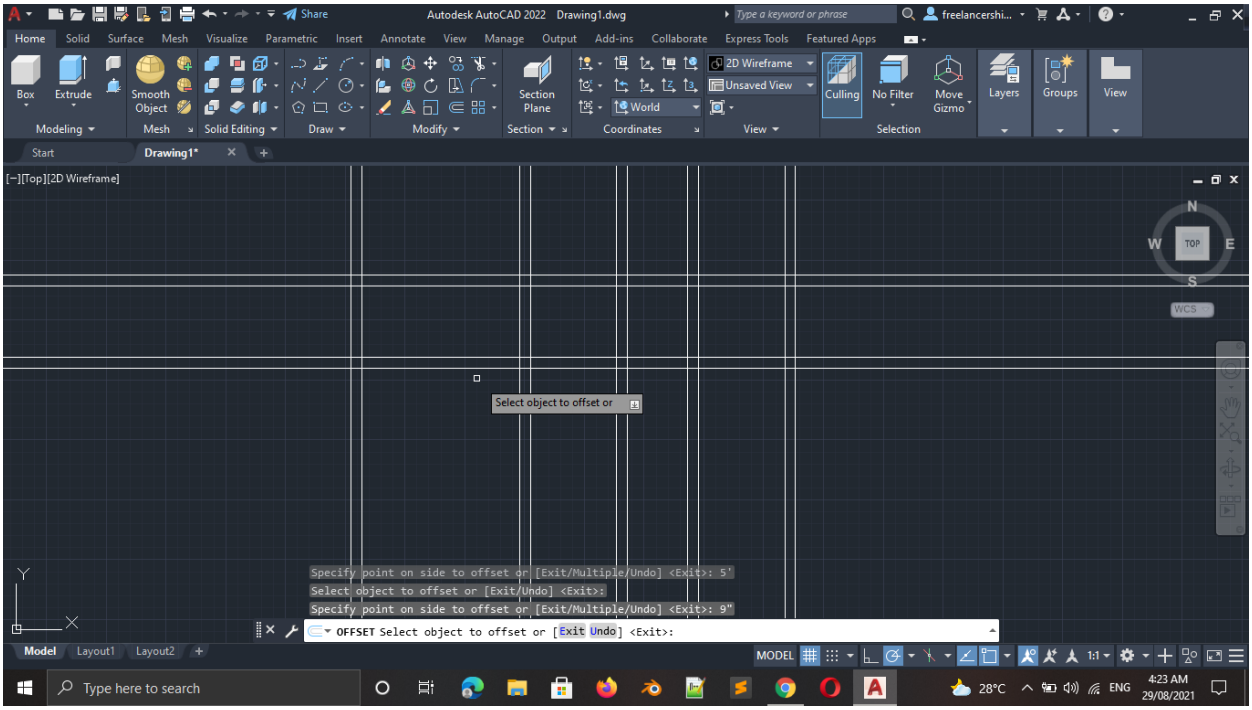

Figure 1.1

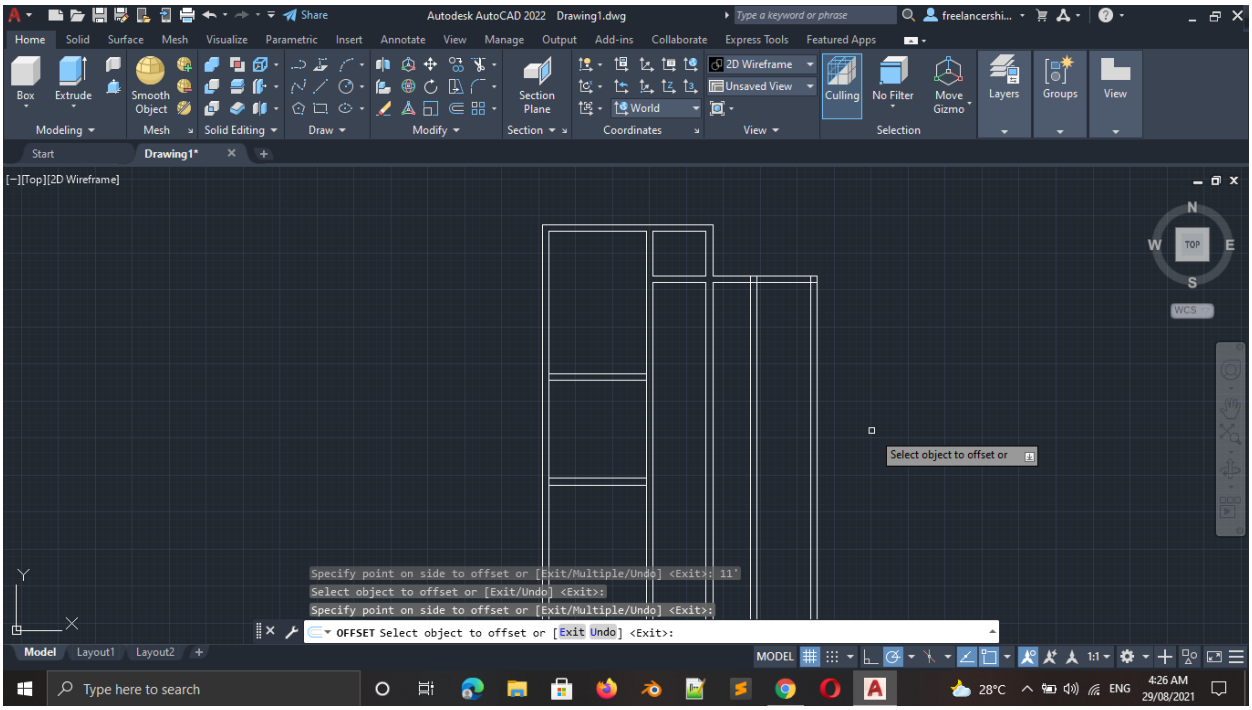

Figure 1.2

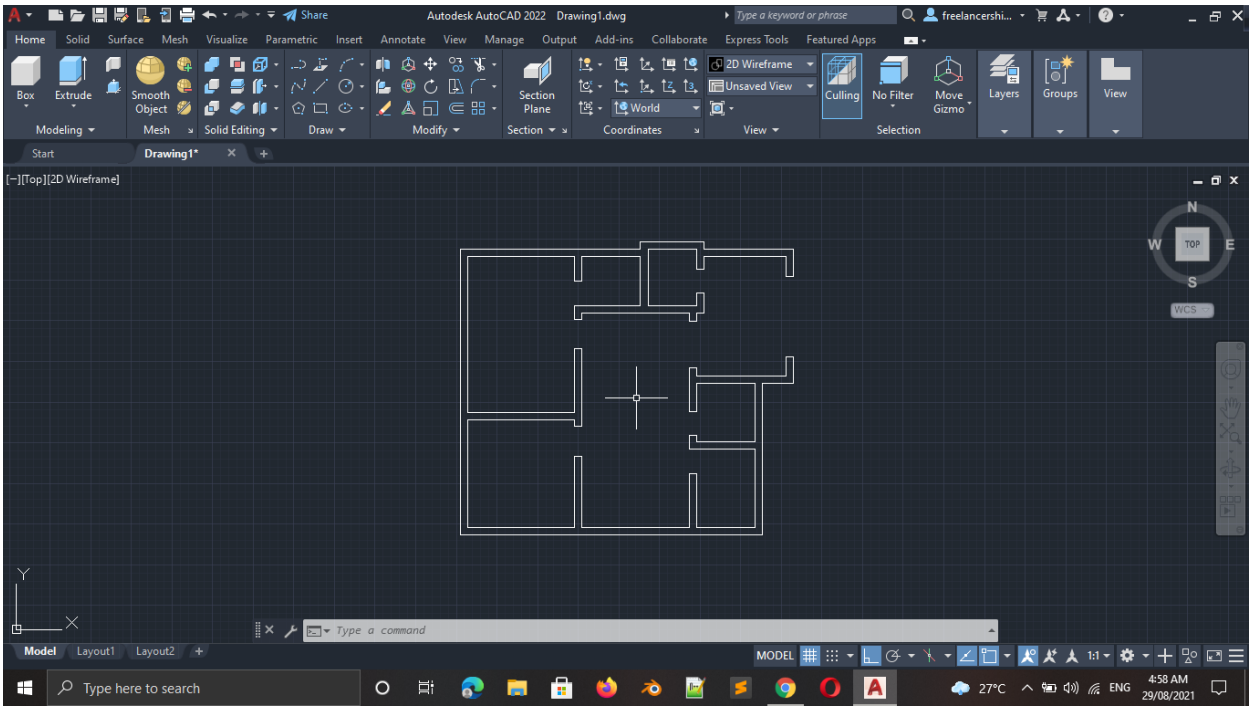

Figure 1.3

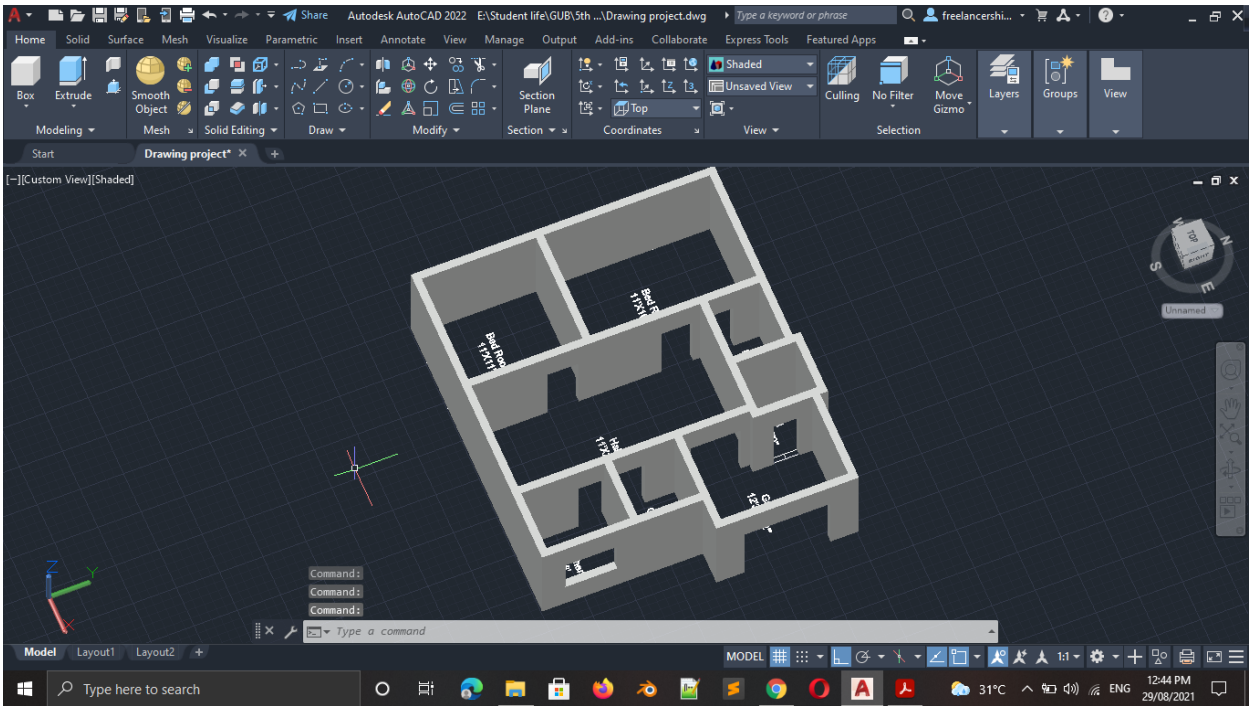
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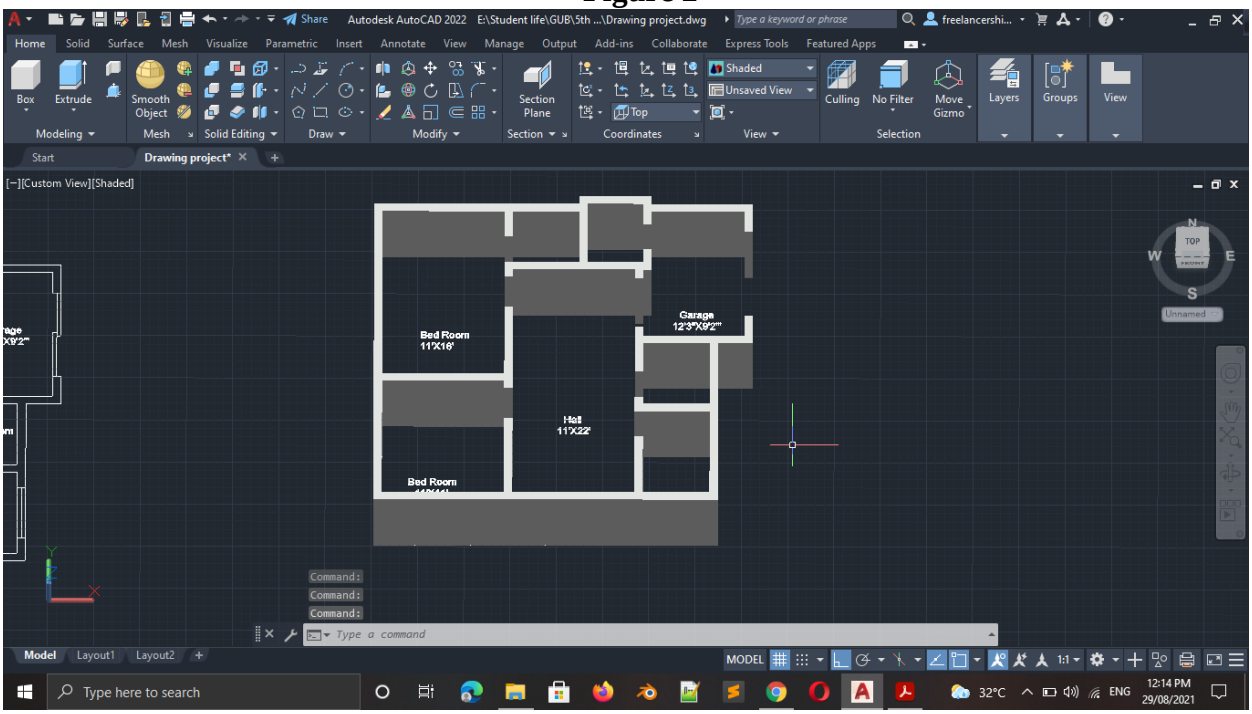
Figure 2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Garage 12'3"X9'2"
Hall 11'X22'
Bed Room
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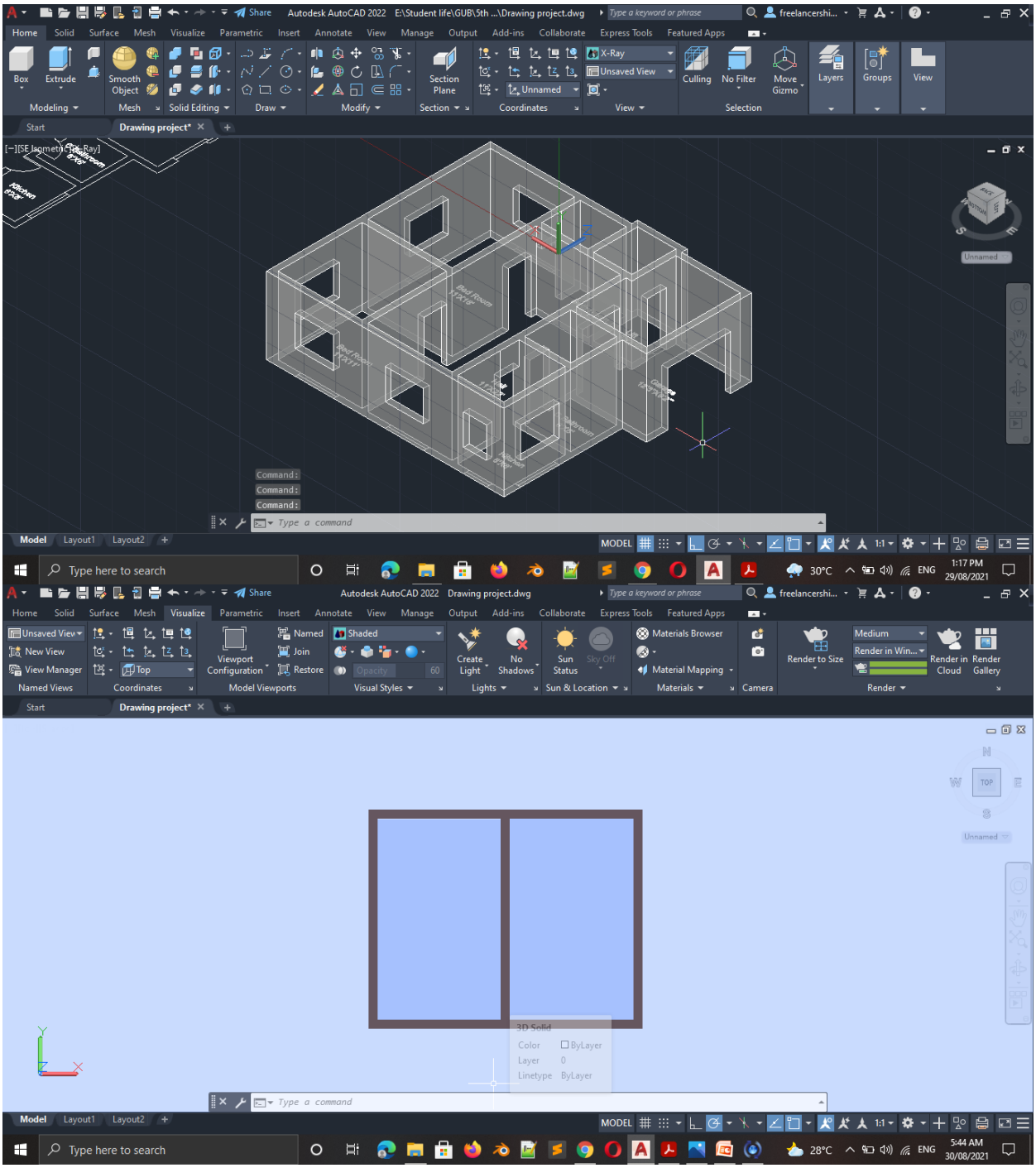
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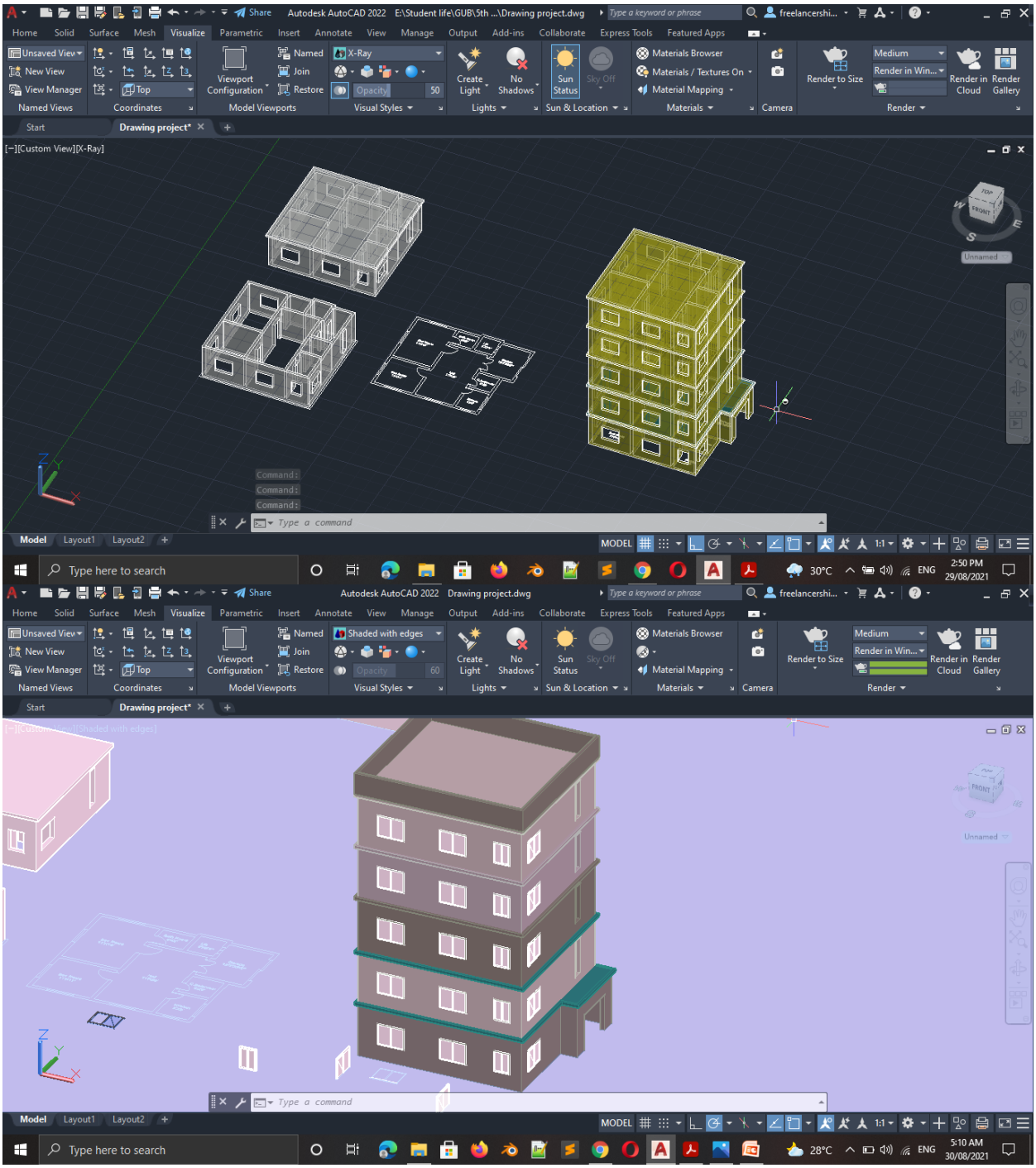
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Create Light
No Shadows
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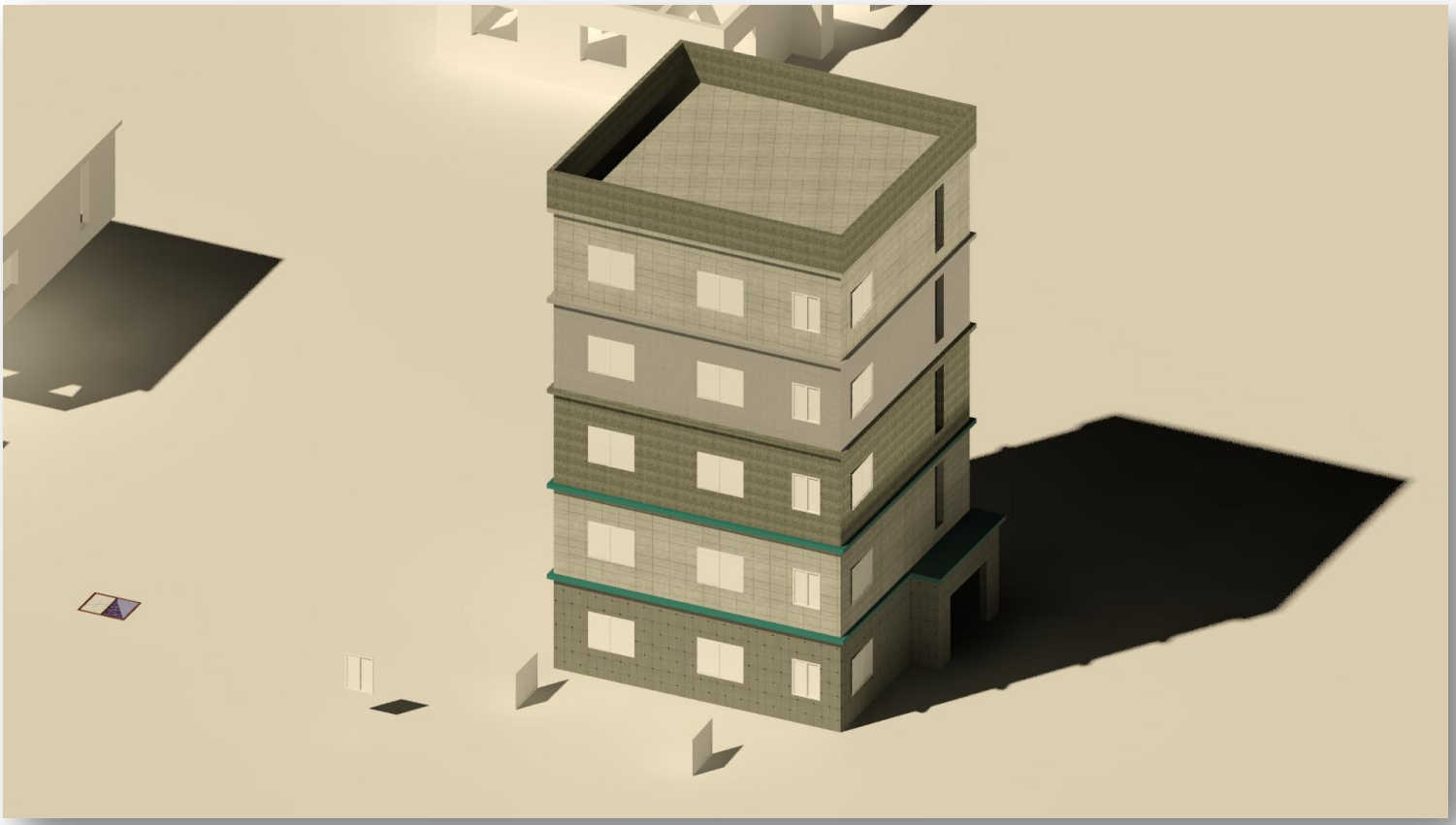

Final Rendered Output

3.2.2 AnalysisandOutcome

- At the first drawing the Vertical and horizontal line .
- Created rooms using the offset
- Trimmed the extra lines using trim tool
- Then extruded the walls
- In 3d mode, Installed window and doors.
- Used rectangle for roof
- Copied the whole thing and placed on top of another
- Created the basement.

Chapter4

Conclusion

4.1 Introduction

My 3d house plan and modeling. Converted the 2d into 3d. I extruded the walls and then attached the window and door. And then I've copied the floor and extended the upper floors. And finally the roof was created.

4.1 Practical Implications

I've created the rooms shape using trimming the extra offset lines. When my 2d drawing is completed then I converted it into a 3D model and drew the doors and windows. And now my drawing is almost completed. . After I've created all the rooms I've created a rectangle along the border of my design using poly-line tool for the roof. And now joined the full drawing and extruded upside as you can see in Figure 2. Then I've created the window and door. For upper part of the door I've created the rectangle tool and extruded 3' from selling.

4.2 Scope of Future Work

As this is my first floor plan or architect project so, if there is a option to build my own house I will use this project plan instead.

References

[1] Mr. Jack, AutoCad tool Introduction for beginners , 12 December 2019

[2] A. Reza and M. Allam,'' Techniques in array processing by means of transform-tons,''31 December 2014