AUTOCAD
SOLIDWORKS CATIA

6 Months Program

3 Months E-Learning
3 Months Internship

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What is Autocad, 3Ds Max & Revit?

AUTOCAD: AutoCAD was derived from a program that began in 1977, and then released in 1979[4] called Interact CAD,[5][6][7] also referred to in early Autodesk documents as MicroCAD, which was written prior to Autodesk's (then Marinchip Software Partners) formation by Autodesk cofounder Michael Riddle.

3Ds Max: The highly popular and professional 3D graphics software for 3D animation, models, games, and images, Autodesk 3ds Max is used by television commercial studios, video game developers, architectural visualization studios, as well as for movie effects and pre-visualization.

Revit: Revit is software for Building Information Modeling. Revit supports a multidiscipline design process for collaborative design. Its powerful tools let you use the intelligent model-based process to plan, design, construct, and manage buildings and infrastructure.

Tutor Details

Mr. Ramachandran has 11 years of experience working for the major automobile giants in India. He has been instrumental in the design and development team of these companies and has contributed immensely to the creation of vehicle designs there. He went on to be one of the Co-founders of his own

Ramachandran

Electric Vehicle company and was successful in bringing his designs to market. The two-wheelers designed by him went on to be termed ergonomic and easy to use. Soon after learning about the company, he changed his views towards academics, wanting to educate the next generation of vehicle designers.Ramachandran's focus is not just on a growing student community, he works to create quality designers in the industry who can one day become leaders in their industry.

Course Structure

➤ **3** months E-Learning

➤ **3** months Internship

➤ Live Session for Doubt Clearance (Monday to Friday 10 AM to 7 PM)

➤ 100% Placement Assistance

Certification

AVODHA Course Completion Certficate


Autodesk Certification
(paid)

Fees Structure

➤ Admission Fee : 3,800

➤ Total Fee : 13,800

Avodha provides Job-oriented courses in an affordable price. The total price of our course is ₹13,800/- ; but to avail the course, he/she has to pay only ₹3,800/- as an admission fee & rest of the amount ₹10,000/- has to be paid only after getting the job related to the course he/she joined at Avodha, ie., The first installment ₹5,000/- has to pay on the first day of his/her employment in a job wherein they are placed through Avodha. And the second payment of ₹5,000/- needs to be done once the student completes 30 days of employment in the Job they have been placed via Avodha.

COURSE CURRICULUM

INTRODUCTION

➤ Introduction to AutoCAD Interface

➤ Introduction to AutoCAD user interface

➤ AutoCAD Navigation Tools

➤ Understanding Co-ordinate System

➤ Limits and Units

➤ Creating a Template

➤ Making Lines

➤ Lines Using Polar

➤ Circles in AutoCAD

➤ Arc in AutoCAD

➤ Ellipses

➤ Rectangles
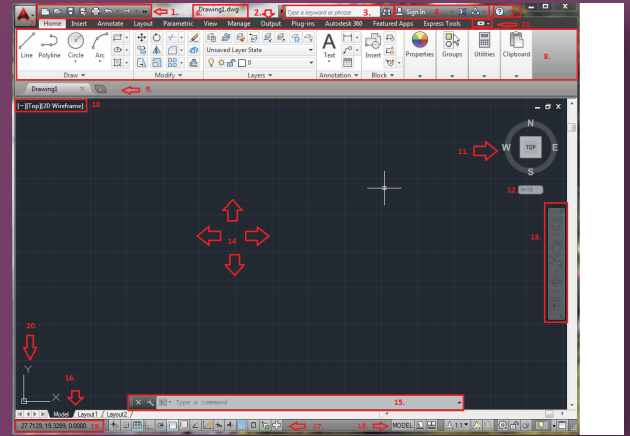
➤ Introduction to Polyline and Spline

➤ Points and Revision Clouds

➤ Construction Line and Ray

MODEL 3 - MODIFICATION

➤ Move and Copy Command

➤ Rotate Command

➤ Offset Command

➤ Trim and Extend

➤ Erase, Explode and Overkill

➤ Stretch Command

➤ Break and Join

➤ Lengthen and Reverse

➤ Creating Basic Hatches Part - 1

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SolidWorks and CATIA
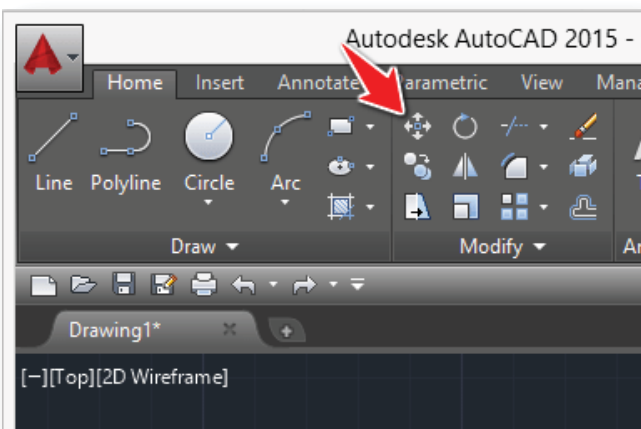
- Set Origin and Associative Hatch
- Layer Part
- Text Part
- Dimension Part
- Multileader
- Table & Table Styles
- Block
- Groups
- Attributes
- Isometric
- Parametric
- Page Setup, Layout & Plots
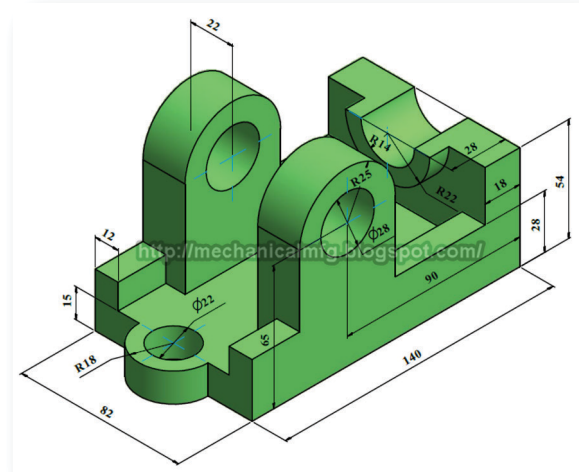
AUTOCAD COMPLETE EXERCISES

- AutoCAD 'Learn with Us' Exercise

AUTO CAD BONUS CONTENT

- Introduction to Civil Planning
- Basics of Civil Planning Part
- Placement Theory Part
- Blocks, Attributes & Pallets
- Placement of components From Tool Palette
- Placement of components from Design Centre
- Section Drafting
- Staircase Calculation & Drafting

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- Ray, Text, Layers & Stairs
- Elevation
- Detailing Part
- Civil Page & Layouts
- X-Ref

INTRODUCTION TO AUTOCAD 3D

- 3D Interface Settings
- Default Tools

COMMANDS AND SELECTION

Short Commands
Object Selection
2D Draw to 3D
Adjust Positions
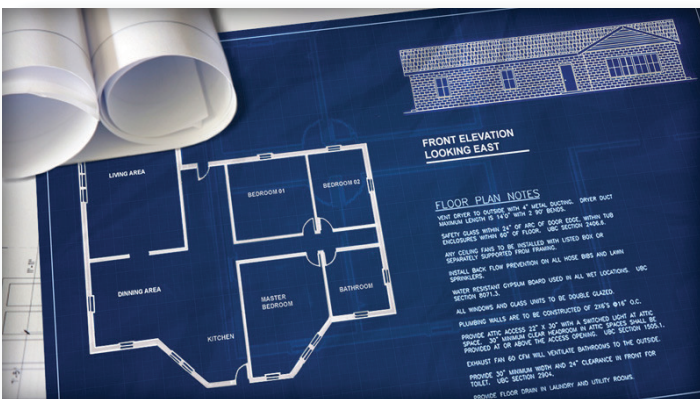Press Pull

VISUAL STYLES

- Type of Visual Styles

NEW PROGRAMMES

- 1. New page
- 2. Import
- 3. Save & Save as
- 4. Export

INTRODUCTION TO SOLIDWORKS

- Introduction to Solidworks
- Customizing Command Managers and Toolbars in Solid Works
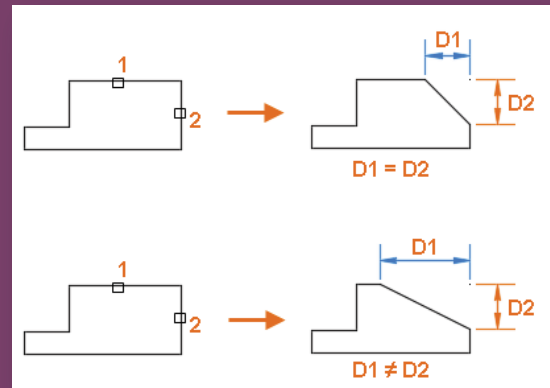- User Interface of Solid Works

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DRAWING SKETCHES FOR SOILD MODELS

➤ Starting a New File and Opening an Existing one in Solid Works
➤ Entering the Sketching Environment
➤ Sketch Editing Tools
➤ Creating Line, Centreline, and Midpoint Line
➤ Creating Circles
➤ Creating Arcs
➤ Creating Rectangles
➤ Creating Polygons
➤ Creating Splines
➤ Creating Slots
➤ Placing Points
➤ Creating Ellipses and Elliptical Arcs
➤ Creating Parabolic and Conic Curves
➤ Creating Equation Driven Curves
➤ Drawing Display Tools
➤ Deleting Sketching Entities

EDITING AND MODIFYING SKETCHES

➤ Trimming Entities
➤ Extending Entities
➤ Filleting Entities
➤ Creating Chamfers
➤ Offsetting Entities
➤ Mirroring Entities
➤ Dynamically Mirror Entities
➤ Moving Entities
➤ Rotating Entities
➤ Scaling Entities
➤ Stretching Entities
➤ Copying and Pasting Entities
➤ Creating Linear Pattern
➤ Creating Circular Patterns
➤ Modifying Sketch Patterns
➤ Splitting Entities
➤ Writing Text

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- ➤ Adding Material Along Guide
- ➤ Creating Stiffening Ribs
- ➤ Using Solid Combine Tool
- ➤ Adding Material by Using Multi - Section Tool 1
- ➤ Creating Edge Fillet
- ➤ Creating Fillets by Face to Face and Tri-Tangent Tool
- ➤ Creating Chamfers
- ➤ Creating Draft
- ➤ Creating Shell on Object
- ➤ Using Thickness Tool
- ➤ Applying Threading/Tapping
- ➤ Using Remove Face and Replace Face Tools
- ➤ Using replace face tools
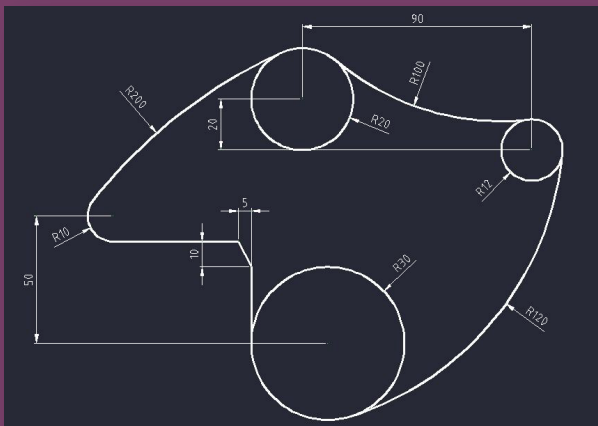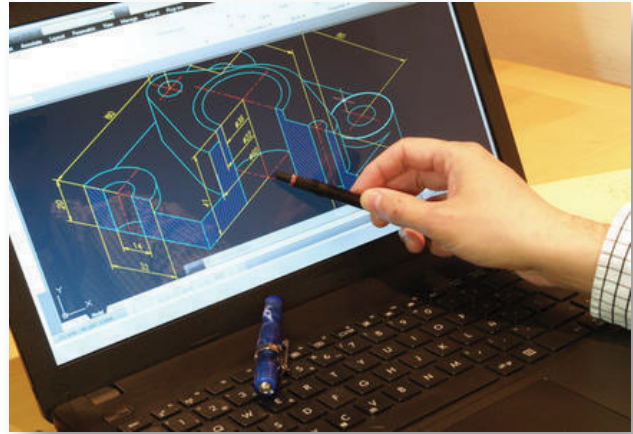
- ➤ Editing the Feature
- ➤ Measuring Tools
- ➤ Creating Transformation by Using Translate/Rotate Tools
- ➤ Creating Transformation by Using Symmetry/Axis - Axis Tools
- ➤ Creating Transformation by Using Mirror/Scale Tools
- ➤ Creating Rectangular Pattern of Features

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SURFACING (GSD) WORK BENCH

- Introduction to Generative Shape Design i.e., Surfacing
- Using Wireframe Tool Point
- Using Wireframe Tool Point
- Using Wireframe Tool Plane
- Using Wireframe Tool Project Combine
- Using Wireframe Tool Intersection & Curve Offset
- Using Wireframe Tool Circle and Conic
- Using Wireframe Tool Curves
- Creating Offset Surface
- Creating Surface by Using Sweep Tool
- Creating Fill Surface
- Creating Multi - Section Surface
- Adding Surface by Blend Tool
- Using Surface Operation Join, Heal, Dissemble Tools
- Using Split and Trim Surface Operations
- Using Boundary and Extract Tool
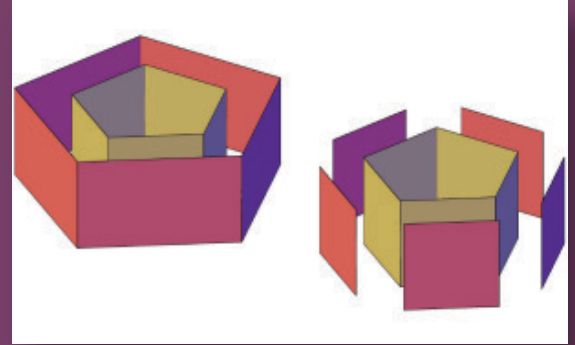
- Creating Surface Fillets
- Creating Surface Chamfer & Extrapolate
- Surface - Example 1
- Using Body in White Tools 1
- Using Body in White Tools 2
- Creating Geometrical Set
- Using Tools Toolbar in Surface
- Applying Material to Surface

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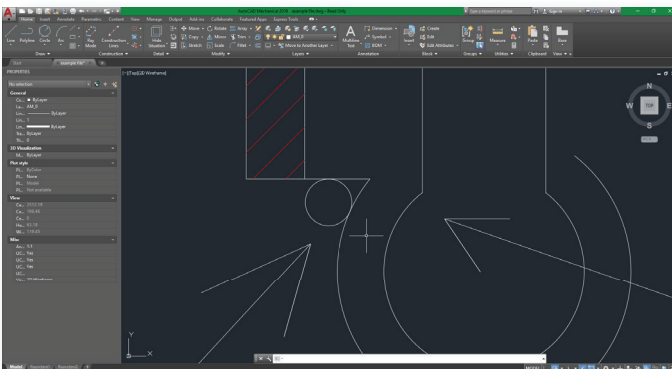
ADDING RELATIONS AND DIMENTIONS TO SKETCHES

- ➤ Adding Relations
- ➤ Adding Automatic Relations
- ➤ Dimensioning a Sketch and Smart Dimension Tool
- ➤ Adding Horizontal and Vertical Dimensions
- ➤ Aligned Dimensions
- ➤ Angular Dimensions
- ➤ Adding Diametric Dimensions
- ➤ Adding Radial Dimensions
- ➤ Adding Linear Diametric Dimensions
- ➤ Adding Ordinate Dimensions
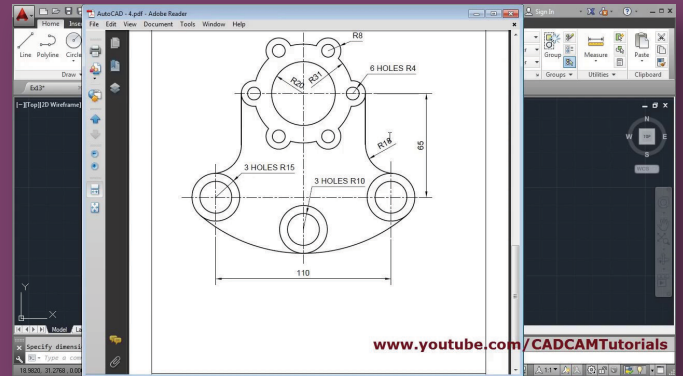
ADVANCED DIMENSIONING TECHNIQUES & BASE FEATURE OPTION

- ➤ Fully Defining the Sketches
- ➤ Dimensioning the True Length of an Arc
- ➤ Measuring Distances
- ➤ Determining the Section Properties of Closed Sketches
- ➤ Modifying the View Orientation
- ➤ Changing the View Orientation the Reference Triad
- ➤ Displaying the Model in Different Viewport Configurations
- ➤ Display Modes of a Model
- ➤ Assigning Materials to the Model

DIMENSIONING COMPLEX CURVES IN AutoCAD

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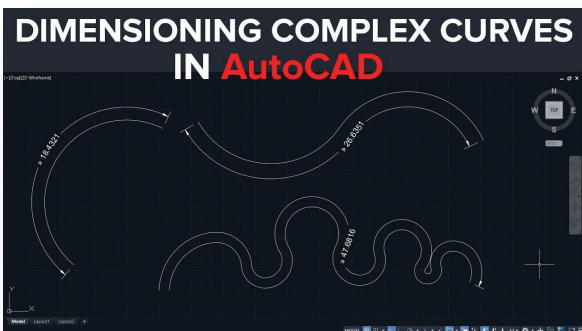
CREATING REFERENCE GEOMETRICS

- ➤ Need for Creating Planes
- ➤ Creating Offset Planes and Parallel Planes passing Through a Point
- ➤ Creating a plane Normal to a Curve and in the Middle of Two Faces
- ➤ Creating a plane on Non-planar Surface
- ➤ Creating Reference Axes
- ➤ Creating Reference Points
- ➤ Creating Reference Coordinate Systems
- ➤ Creating Centre of Mass

— Planar

— Non-planar
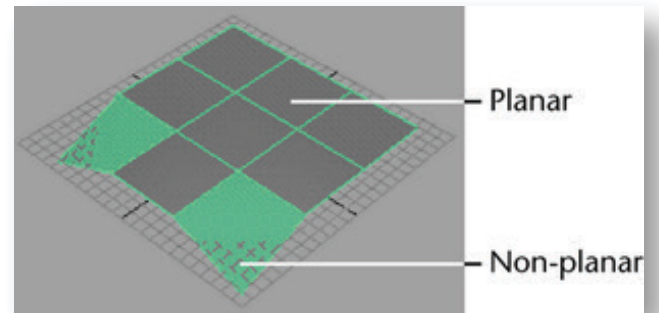
PART MODELING-1

- ➤ Creating Extruded Features
- ➤ Creating Revolved Features
- ➤ Creating Extruded Cuts
- ➤ Creating Revolved Cuts
- ➤ Determining the Mass Properties of Solid Models
- ➤ Convert Entities Tool
- ➤ Creating Intersection Curves
- ➤ Offset on Surface Tool
- ➤ Using Swept Boss Tool
- ➤ Using Lofted Boss Tool
- ➤ Using Hole Wizard and Thread Feature
- ➤ Using Wrap Feature
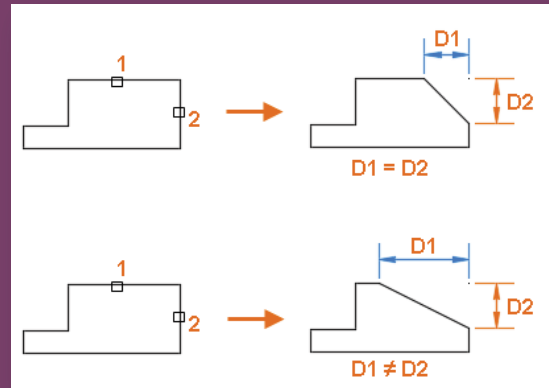- ➤ Creating Rib Feature
- ➤ Other Miscellaneous Tools

Extrude in AutoCAD

educba.com

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➤ Creating Surface by Using Sweep Tool

➤ Creating Fill Surface

➤ Creating Multi - Section Surface

➤ Adding Surface by Blend Tool

➤ Using Surface Operation Join, Heal, Dissemble Tools

➤ Using Split and Trim Surface Operations

➤ Using Boundary and Extract Tool

SHEET METAL WORK BENCH

- ➤ Introduction to Sheet Metal Design
- ➤ Setting Sheet Parameter
- ➤ Creating Sheet Metal Wall
- ➤ Applying Bends
- ➤ Using Curve Mapping Tool
- ➤ Applying Bend from Flat
- ➤ Using Bending Fold and Unfold Tools
- ➤ Using Curve Mapping Tool
- ➤ Creating Rolled Walls Hopper
- ➤ Creating Rolled Walls Free from Surface
- ➤ Creating Surface Stamp
- ➤ Creating Bead
- ➤ Creating Curve Stamp
- ➤ Crating Flanged Cut-out
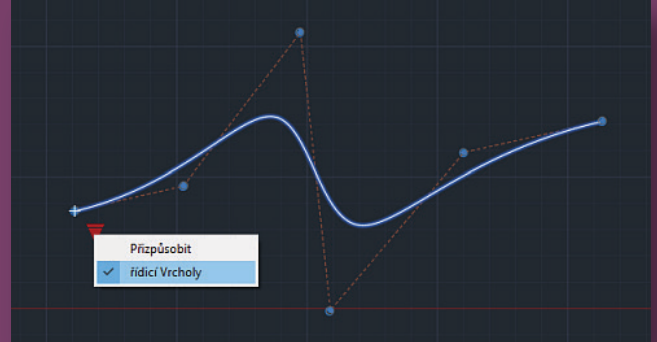
DRAFTING WORK BENCH

- ➤ Introduction to Drafting
- ➤ Creating Views by View Creation Wizard
- ➤ Creating View by Advance Front View
- ➤ Adding Projection View
- ➤ Adding Auxiliary View
- ➤ Creating Isometric View
- ➤ Creating Offset/Aligned Section View
- ➤ Creating offset/aligned cut section view
- ➤ Creating Detail View

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Offline Center

Kochi
(Head Quarters)

Hyderabad

Mumbai

Bangalore

Chennai

Delhi

Trivandrum

Ernakulam

Kannur

AutoCAD
SolidWorks and CATIA

Thrissur

Kottayam

Kozhikode

Coimbatore

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Park, Parthasarathi Puram,
Chennai, Tamil Nadu - 600017

Ernakulam Offline Center

Avodha EduTech Pvt. Ltd. V
Cinemas Building,
Seaport - Airport Road,
Vidya Nagar Colony,
Kakkanad, Kerala 682022

Kannur Regional office

3rd Floor, Rubco House,
near Mother and Child Hospital,
Caltex, Kannur, Kerala 670012

Trivandrum Regional Office

2nd Floor Asiatic Business
Centre Near Technopark Phase
3 Campus, Kazhakkoottam,
Kerala - 695582

Hyderabad Regional Office

Level 6, N Heights,
HITEC City, Hyderabad,
Telangana - 500081

Delhi Regional Office

1st Floor, B-39,Connaught
Place, New Delhi,
Delhi - 110001

Kozhikode Offline Center

Sreevalsam Building, State Highway 29,
East Nadakkave,
Nadakkave, Kozhikode, Kerala 673006

Bangalore Regional Office

GoodWorks Infinity Park,
Electronics City Phase 1,
Bengaluru Karnataka - 560100

Mumbai Regional Office

10th Floor, Parinee Cresenzo,

Mumbai, Maharashtra - 400051

Kottayam Offline Center

The Dispensary by Creative Coworking Cube (C³)
Thamarapally,
Pulimoodu JN, SH 1, Kottayam, Kerala 686001

Thrissur Offline Center

dewSpace - Coworking, G6C2+XCR, West Fort,
Asvary Nagar, Ayyanthole, Thrissur, Kerala 680011