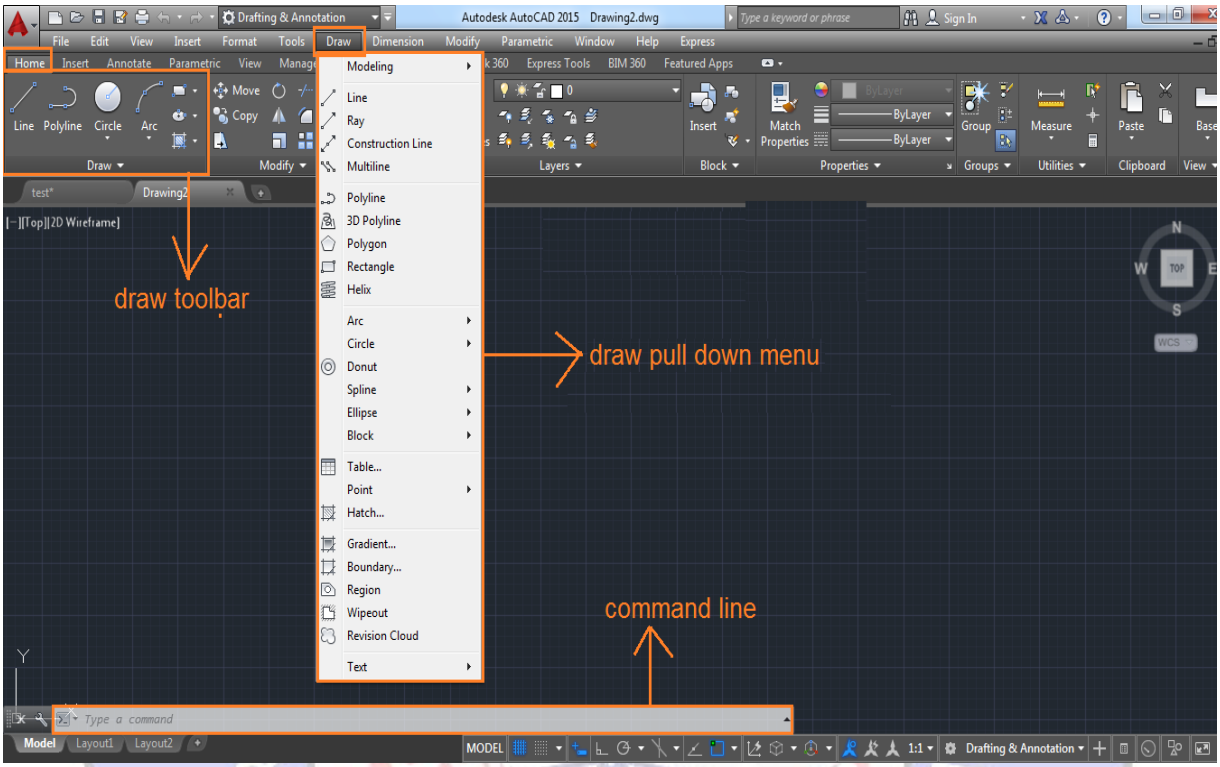
## 2. Drawing Commands

Drawing commands can be entered from the keyboard (command line), the draw toolbar, or the draw pull down menu.




### 2.1.Line

Draw Line simple lines or series of lines segments .access to command line by one way of the following:

***1. Command Line: Line or L***

***2. Menu Bar: Draw → Line***

***3. Draw Bar*** 

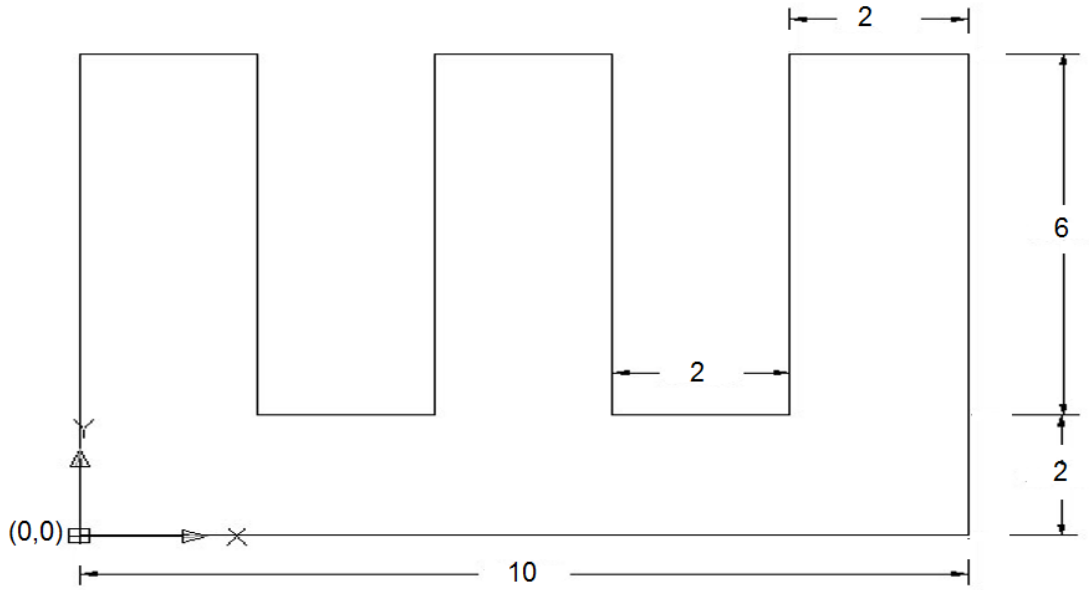
When execute command line the program requires specify first point, display in command line:

***Specify first Point:***
***Specify next point or [Undo]:***
***Specify next point or [Close/Undo]:***

***Options:***

- **C:** this option close series of lines, connect first point with last point by line.
- **U:** enter U for undo. AutoCAD backs up one segment, undoing it so that you can recreate it.

Example: Draw the figure below, start from the original point (0, 0)




**Absolute Coordinate System**

Command: Line
Specify first point: 0, 0
Specify next point: 10, 0
Specify next point: 10, 8
Specify next point: 8, 8
Specify next point: 8, 2
Specify next point: 6, 2
Specify next point: 6, 8
Specify next point: 4, 8
Specify next point: 4, 2
Specify next point: 2, 2
Specify next point: 2, 8
Specify next point: 0, 8
Specify next point: 0, 0 or C

**Relative Coordinate System**

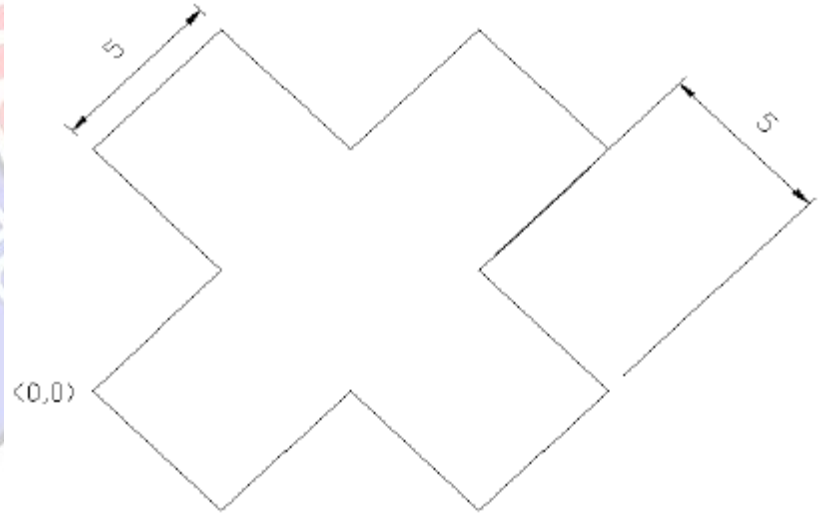
Command: Line
Specify first point:0,0
Specify next point:@10,0
Specify next point:@0,8
Specify next point:@-2,0
Specify next point:@0,-6
Specify next point:@-2,0
Specify next point:@0,6
Specify next point:@-2,0
Specify next point:@0,-6

Specify next point:@-2,0
Specify next point:@0,6
Specify next point:@-2,0
Specify next point:@0,-8 or C

**Relative Polar Coordinate System**

Command: Line
Specify first point:0,0
Specify next point:@10<0
Specify next point:@8<90
Specify next point:@2<180
Specify next point:@6<270
Specify next point:@2<180
Specify next point:@6<90
Specify next point:@2<180
Specify next point:@6<270
Specify next point:@2<180
Specify next point:@6<90
Specify next point:@2<180
Specify next point:@8<270 or C

***Example***: Draw the figure note the figure is start from original point (0,0) .and the angle between sides is 45




**Absolute Coordinate System**

Command: Line
Specify first point: 0, 0
Specify next point: 3.5,-3.5
Specify next point: 7, 0
Specify next point: 10.5,-3.5
Specify next point: 14, 0
Specify next point: 10.5, 3.5
Specify next point: 14, 7
Specify next point:10.5,10.5
Specify next point:7,7
Specify next point:3.5,10.5
Specify next point:0,7
Specify next point:3.5,3.5
Specify next point:0,0 or C

**Relative Coordinate System**

Command: Line
Specify first point:0,0
Specify next point:@3.5,-3.5
Specify next point:@3.5,3.5
Specify next point:@3.5,-3.5
Specify next point:@3.5,3.5
Specify next point:@-3.5,3.5
Specify next point:@3.5,3.5

Specify next point:@-3.5,3.5
Specify next point:@-3.5,-3.5
Specify next point:@-3.5,3.5
Specify next point:@-3.5,-3.5
Specify next point:@3.5,-3.5
Specify next point:@-3.5,-3.5 or C

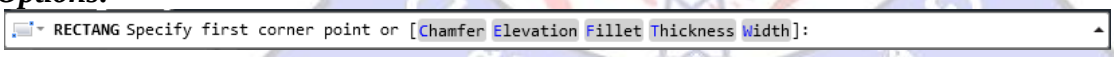
**Relative Polar Coordinate System**

Command: Line
Specify first point:0,0
Specify next point:@5<315
Specify next point:@5<45
Specify next point:@5<315
Specify next point:@5<45
Specify next point:@5<135
Specify next point:@5<45
Specify next point:@5<135
Specify next point:@5<225
Specify next point:@5<135
Specify next point:@5<225
Specify next point:@5<315
Specify next point:@5<225 or C

## 2.2. Rectangle

***1. Command Line: Rectangle, Rec.***
***2. Menu Bar: Draw ⇨ Rectangle.***
***3. Draw Bar.*** 

***Options:***




***C:***
The chamfer command enables to place a chamfer at the rectangle corner. You can set the chamfer distance for the two lines independently.

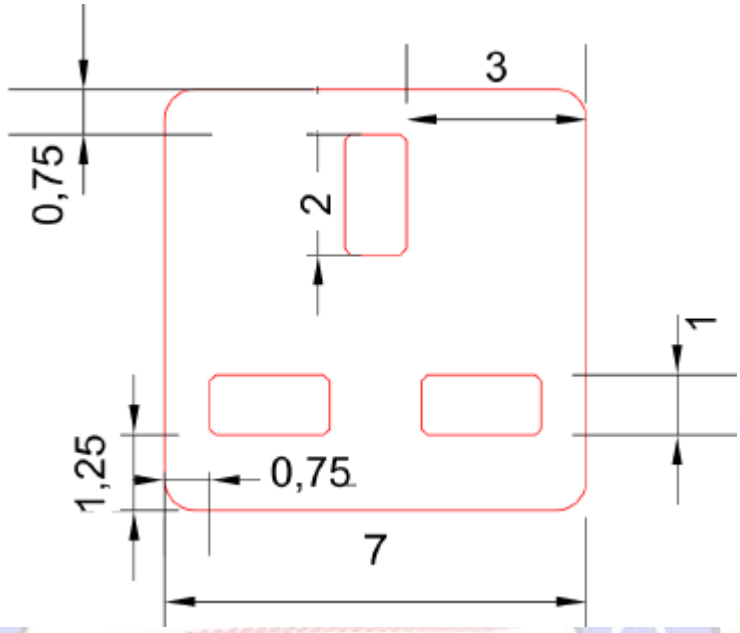
***Specify first chamfer distance for rectangles<0.000>:***
***Specify second chamfer distance for rectangles<0.000>:***

***F:*** the fillet command creates both fillets and rounds on any combination of two lines, arcs, or circles.
***Specify fillet radius for rectangles<0.000>:***

**W:** rectangle can have a width (the default width is 0).

***Specify line width for rectangles<0.000>:***

***Example .*** Draw the figure below (13 Ampere socket outlet), note the figure is start from the point (0,0 )




## Absolute Coordinate System

**Command:Rec**
Specify first corner point or [Chamfer/ Elevation / Fillet / Thickness / Width]: f
Specify fillet radius for rectangles: 0.5
Specify first corner point: 0, 0
Specify other corner Point: 7, 7
**Command: Rec**
Specify first corner point or [Chamfer/ Elevation / Fillet / Thickness / Width]: C Specify first chamfer distance for rectangles: 0.1
Specify second chamfer distance for rectangles: 0.1
Specify first corner point: 0.75, 1.25
Specify other corner Point: 2.75, 2.25
**Command: Rec**
Specify first corner point or [Chamfer/ Elevation / Fillet / Thickness / Width]: C
Specify first chamfer distance for rectangles: 0.1
Specify second chamfer distance for rectangles: 0.1
Specify first corner point: 4.25, 1.25
Specify other corner Point: 6.25, 2.25
**Command: Rec**
Specify first corner point or [Chamfer/ Elevation / Fillet / Thickness / Width]: C
Specify first chamfer distance for rectangles: 0.1
Specify second chamfer distance for rectangles: 0.1
Specify first corner point: 3, 4.25
Specify other corner Point: 4, 6.25

**Command: Rec**
Specify first corner point or [Chamfer/ Elevation / Fillet / Thickness / Width]: f
Specify fillet radius for rectangles: 0.5
Specify first corner point: 0, 0
Specify other corner Point: @7, 7
**Command: Rec**
Specify first corner point or [Chamfer/ Elevation / Fillet / Thickness / Width]: C
Specify first chamfer distance for rectangles:0.1
Specify second chamfer distance for rectangles:0.1
Specify first corner point: 0.75, 1.25
Specify other corner Point: @2, 1
**Command: Rec**
Specify first corner point or [Chamfer/ Elevation / Fillet / Thickness / Width]: C
Specify first chamfer distance for rectangles:0.1
Specify second chamfer distance for rectangles:0.1
Specify first corner point: 4.25, 1.25
Specify other corner Point: @2,1
**Command: Rec**
Specify first corner point or [Chamfer/ Elevation / Fillet / Thickness / Width]: C
Specify first chamfer distance for rectangles:0.1
Specify second chamfer distance for rectangles:0.1
Specify first corner point: 3, 4.25
Specify other corner Point: @1, 2

**Relative Polar Coordinate System**
**Command: Rec**
Specify first corner point or [Chamfer/ Elevation / Fillet / Thickness / Width]: f
Specify fillet radius for rectangles: 0.5
Specify first corner point: 0,0
Specify other corner Point:@9.89<45
**Command: Rec**
Specify first corner point or [Chamfer/ Elevation / Fillet / Thickness / Width]:C
Specify first chamfer distance for rectangles:0.5
Specify second chamfer distance for rectangles:0.5
Specify first corner point: 0.75, 1.25
Specify other corner Point:@2.23<26.56
**Command: Rec**
Specify first corner point or [Chamfer/ Elevation / Fillet / Thickness / Width]: C
Specify first chamfer distance for rectangles: 0.5
Specify second chamfer distance for rectangles: 0.5
Specify first corner point: 4.25, 1.25
Specify other corner Point:@2.23<26.56
**Command: Rec**
Specify first corner point or [Chamfer/ Elevation / Fillet / Thickness / Width]: C
Specify first chamfer distance for rectangles: 0.5
Specify second chamfer distance for rectangles: 0.5