University of Sallahadin
College of Engineering
Electrical Engineering Dept.

Electrical CAD
Lecture Four
Advanced Drawing commands II

Sarkar Jawhar
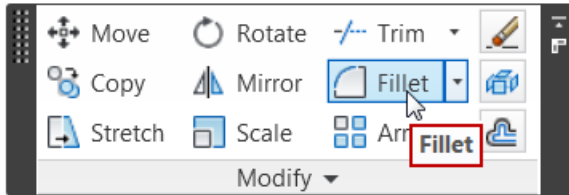MSc in Electrical Engineering
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Contents of This Lecture
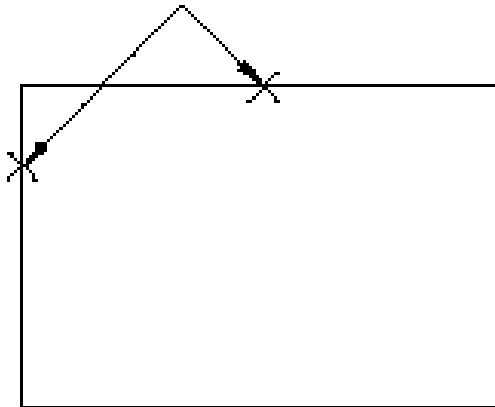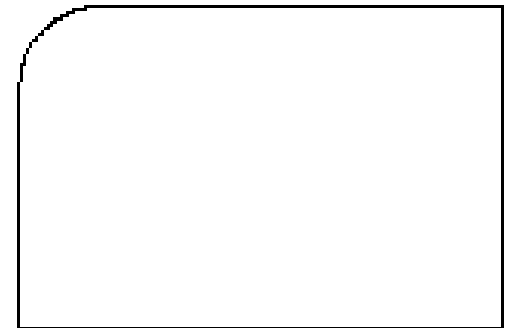
- Modify Commands continue

Fillet

The FILLET command fillets (rounds) the intersecting ends of two arcs, circles, lines, polylines.

SELECT
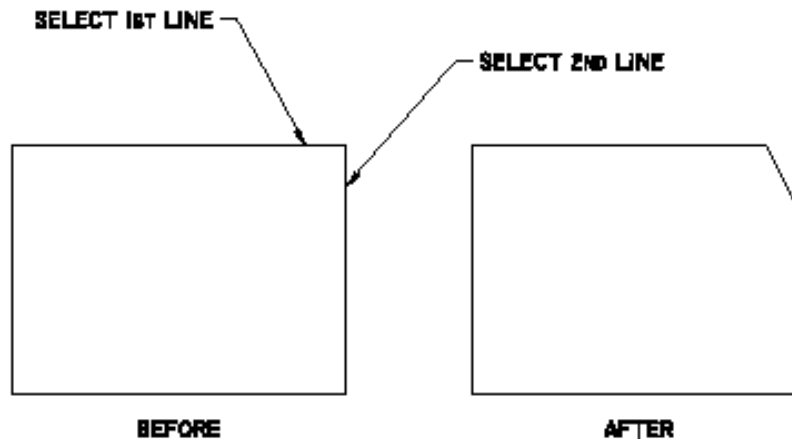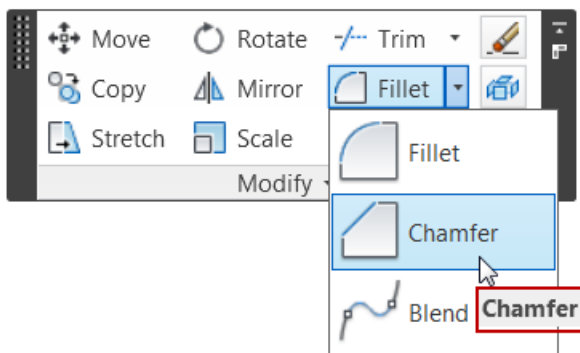LINES

BEFORE

AFTER

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Chamfer

The CHAMFER command allows you to draw an angled corner between two lines. The size of the chamfer is determined by the settings of the first and the second chamfer distances.

If the TRIMMODE system variable is set to 1 (default), then the CHAMFER command trims the intersecting lines to the endpoints of the chamfer line.
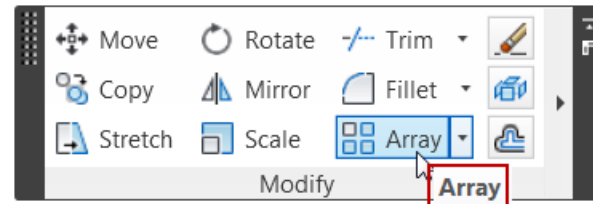
If TRIMMODE is set to 0 (zero), then the CHAMFER command leaves the intersecting lines at the end-points of the chamfer line.

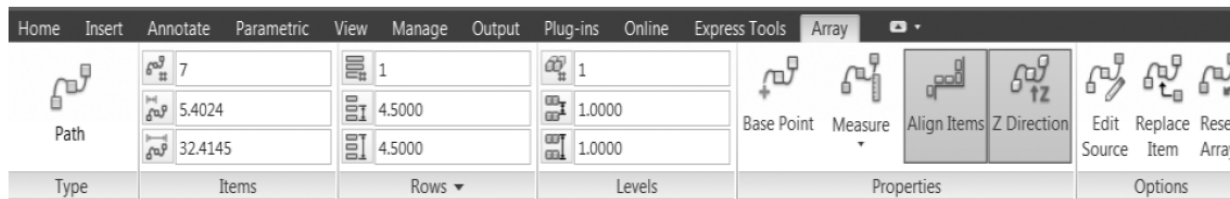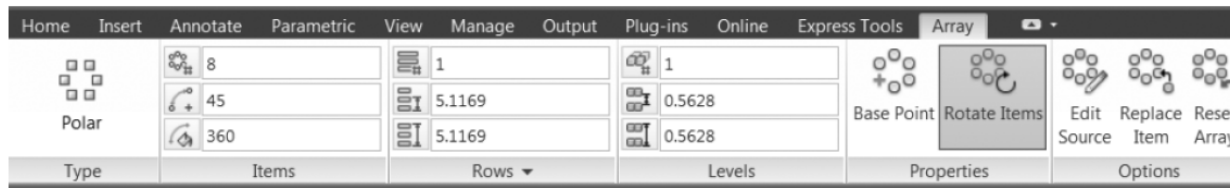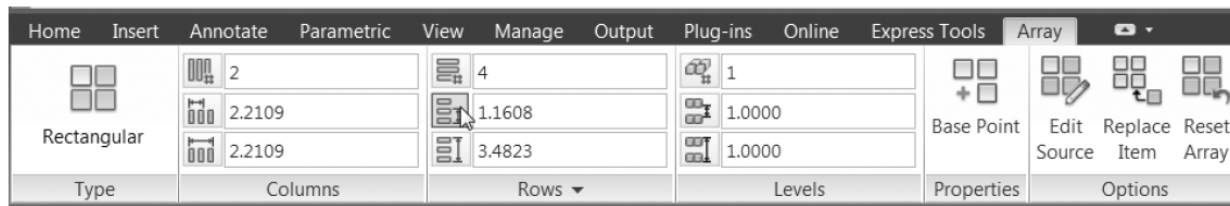SU-Erbil- Engineer Collage – Sarkar Jawhar

Array

The ARRAY command is used to make multiple copies of selected objects in either:

- rectangular
- polar arrays
- along a selected path.

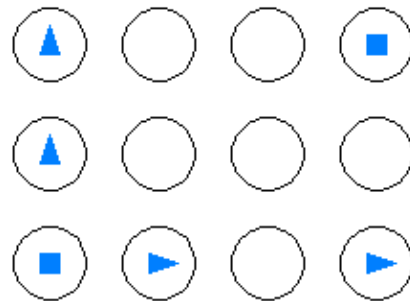Whenever an array object is selected, AutoCAD displays an editing ribbon with panels for editing the selected array.

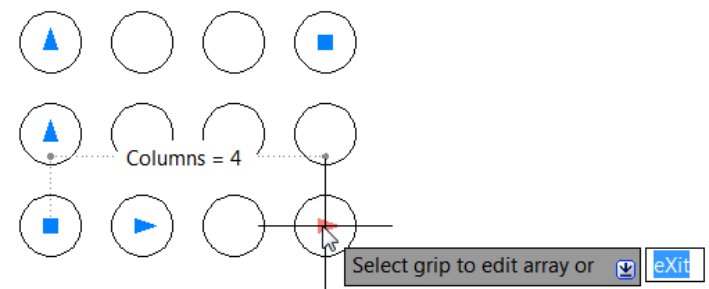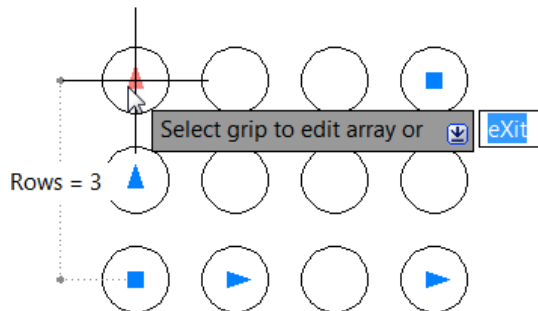SU-Erbil- Engineer Collage – Sarkar Jawhar

Array

Rectangular array creates a pattern of multiple copies in rows and columns. By default, AutoCAD creates a rectangular pattern of 3 rows and 4 columns.
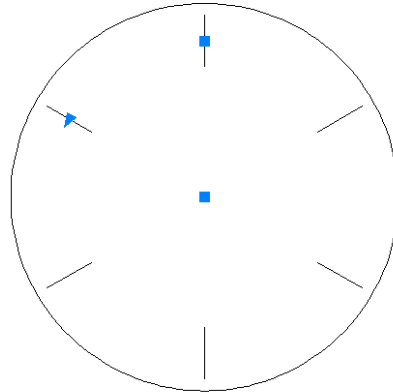

AutoCAD allows you to add additional columns and rows by selecting and drag the last column or last raw of the grip.
To increase the spacing between the rows, select the grip of the second row and first column.

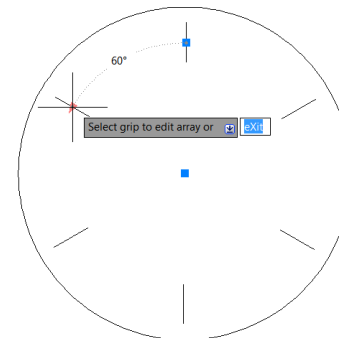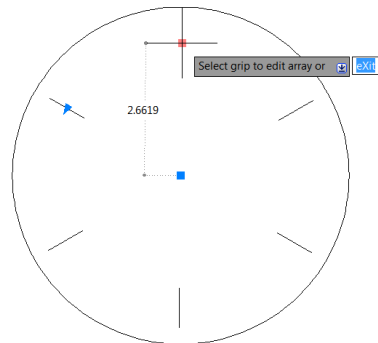SU-Erbil- Engineer Collage – Sarkar Jawhar

Array

Polar array creates multiple copies in a circular pattern. By default, AutoCAD creates a polar pattern of 6 additional copies of the selected object.
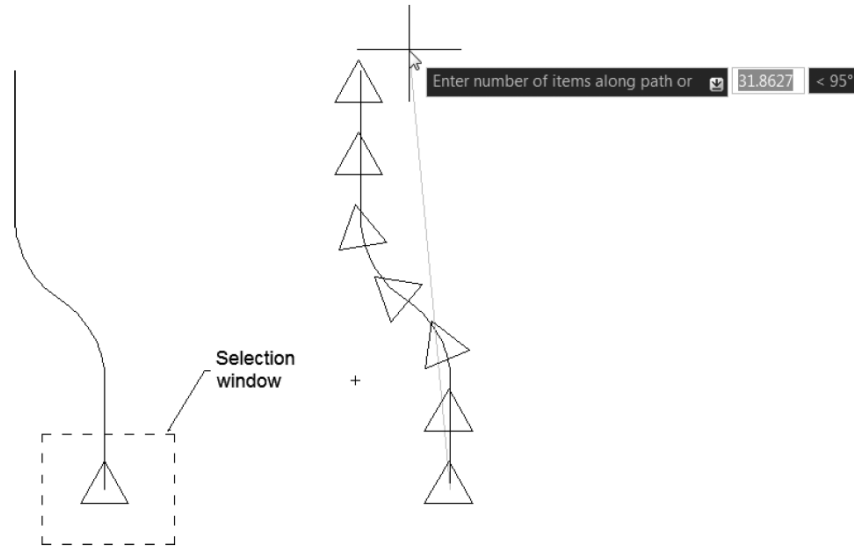
- Base Point to change the array radius.
- Arrayed items to change the angle between the items.
- Center point of the array to reposition the array.

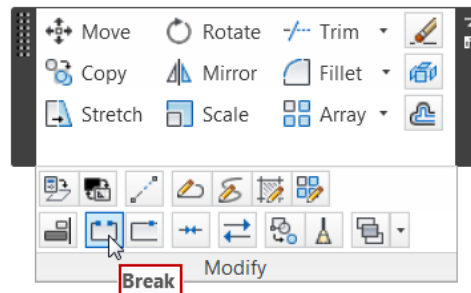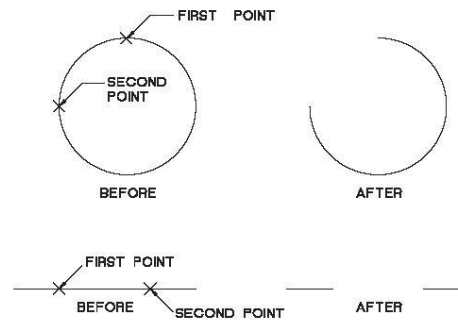SU-Erbil- Engineer Collage – Sarkar Jawhar

Array

In the **Path** array, AutoCAD creates multiple copies of the selected object(s) along a selected path such as a polyline, circle or rectangle. You can specify whether the objects maintain their orientation or are aligned with the path as they are copied.

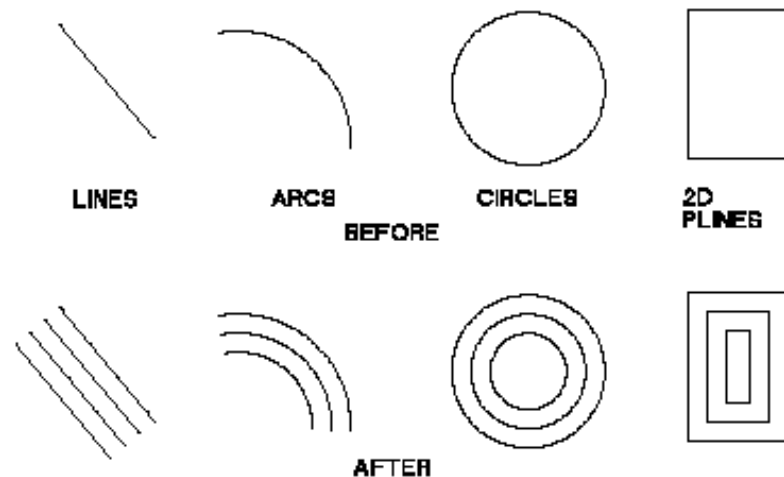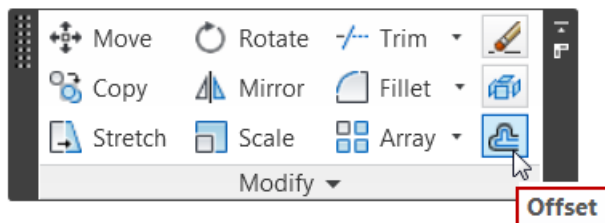SU-Erbil- Engineer Collage – Sarkar Jawhar

Erasing Parts of Objects

The **BREAK** command is used to remove parts of objects or to split an object in two parts, and it can be used on lines, xlines, rays, arcs, circles, ellipses, splines, donuts, traces, and 2D and 3D polylines.

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Offset

The **OFFSET** command creates parallel lines, parallel curves, and concentric circles relative to existing objects.

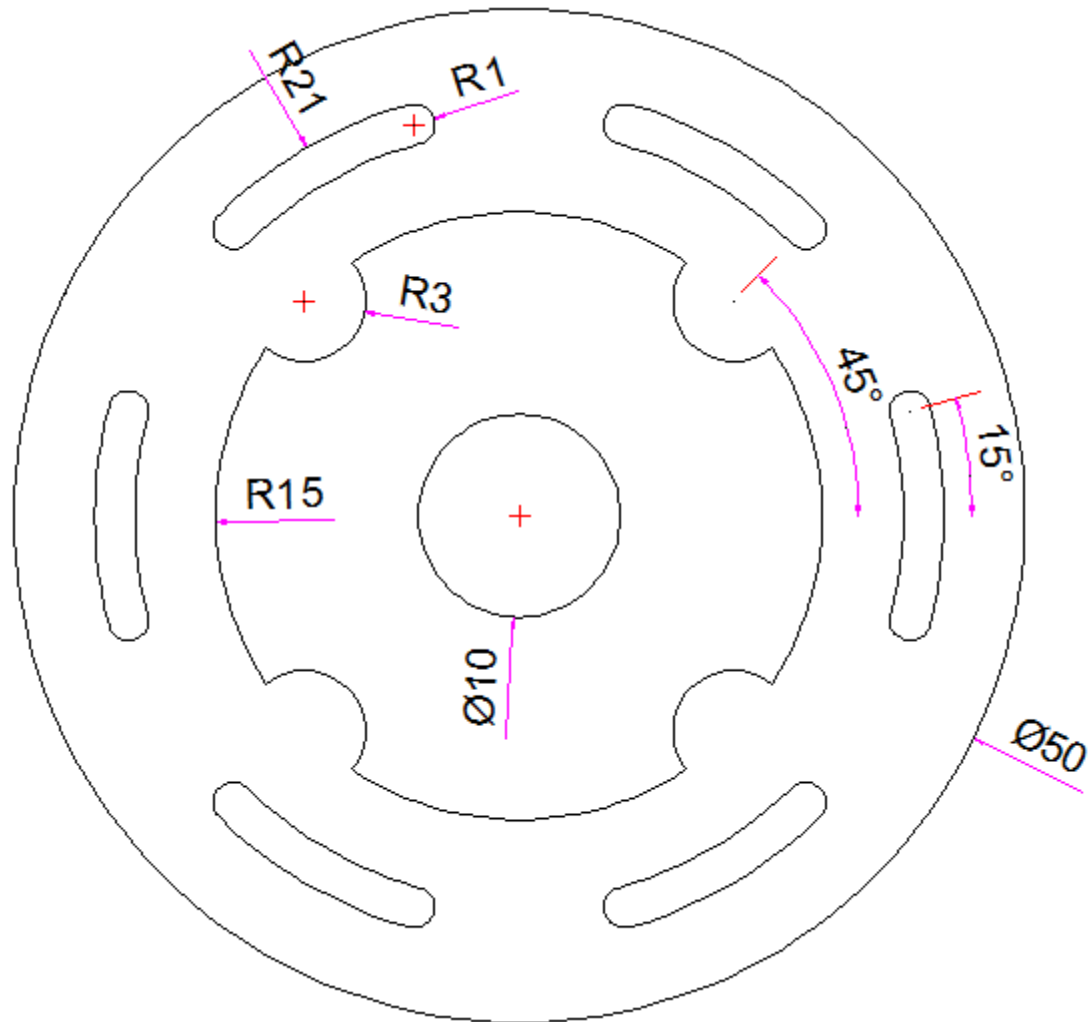SU-Erbil- Engineer Collage – Sarkar Jawhar

Next Lecture

- Dimensioning

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Assignment

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Questions and Thank you

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