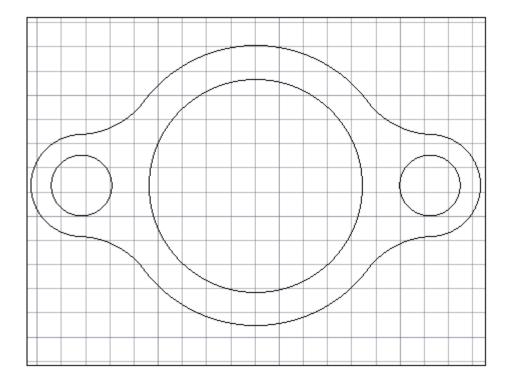
### Task 1:



## **Procedure:**

- Draw two circles with same center one of the diameter of 88 units and other of radius 58 units
- Draw line of 72 units on both sides of the drawn circle center
- Draw two circles one of the diameter 25 units and another of the radius 21 units on the ends of each drawn line
- Fillet the outside circles with radius 33 units at every side
- Trim the unwanted parts from the diagram

Command: c	Specify base point or [Displacement/mOde]	Select objects: 1 found
CIRCLE	<displacement>:</displacement>	Select objects: 1 found, 2 total
Specify center point for circle or	Specify second point or [Array] <use first<="" td=""><td>Select objects:</td></use>	Select objects:
[3P/2P/Ttr (tan tan radius)]: r	point as displacement>: *Cancel*	Current settings: Copy mode = Multiple
Point or option keyword required.	Command: I	Specify base point or [Displacement/mOde]
Specify center point for circle or	LINE	<displacement>:</displacement>
[3P/2P/Ttr (tan tan radius)]:	Specify first point:	Specify second point or [Array] <use first<="" td=""></use>
Specify radius of circle or [Diameter]:	Specify next point or [Undo]: 72	point as displacement>: *Cancel*
58	Specify next point or [Undo]: `*Cancel*	Command: MI
Command:	`	MIRROR
Press ESC or ENTER to exit, or right-	Command: c*Cancel*	Select objects: Specify opposite corner: 0
click to display shortcut menu.	Command: *Cancel*	found
Command: C	Command: C	Select objects: 1 found
CIRCLE	CIRCLE	Select objects: 1 found, 2 total

Specify center point for circle or

[3P/2P/Ttr (tan tan radius)]:

Specify radius of circle or [Diameter]

<58.0000>: d

Specify diameter of circle <116.0000>:

88

Command: I LINE

Specify first point:

Specify next point or [Undo]: <Ortho

on> 72

Specify next point or [Undo]: \*Cancel\*

Command: CO

**COPY** 

Select objects: 1 found

Select objects:

Current settings: Copy mode =

Multiple

Erase source objects? [Yes/No] <No>:

\*Cancel\*
Command:

Command: \*Cancel\* Command: \*Cancel\* Command: MI

**MIRROR** 

Select objects: 1 found

Select objects: 1 found, 2 total

Select objects:

Specify first point of mirror line: Specify second point of mirror line: Erase source objects? [Yes/No] <No>:

Command: MIRROR

Select objects: \*Cancel\*

Command: FI FILTER

Command: \*Cancel\*

Command: F FILLET

Current settings: Mode = NOTRIM,

Radius = 5.0000 Select first object or

[Undo/Polyline/Radius/Trim/Multiple]:

r

Specify fillet radius <5.0000>: 33

Select first object or

[Undo/Polyline/Radius/Trim/Multiple]:

m

Select first object or

[Undo/Polyline/Radius/Trim/Multiple]: Select second object or shift-select to

apply corner or [Radius]:

Specify center point for circle or [3P/2P/Ttr

(tan tan radius)]:

Specify radius of circle or [Diameter]

<44.0000>: 21 Command: c CIRCLE

Specify center point for circle or [3P/2P/Ttr

(tan tan radius)]:

Specify radius of circle or [Diameter]

<21.0000>: d

Specify diameter of circle <42.0000>: 25

Command: \*Cancel\* Command: CO [cuTting

edges/Crossing/mOde/Project/eRase]:

Select object to trim or shift-select to extend

or

[cuTting

edges/Crossing/mOde/Project/eRase/Undo]:

Specify next fence point or [Undo]:

Select object to trim or shift-select to extend

or

[cuTting

edges/Crossing/mOde/Project/eRase/Undo]:

Specify next fence point or [Undo]:

Select object to trim or shift-select to extend

or [cuTting

edges/Crossing/mOde/Project/eRase/Undo]:

Select object to trim or shift-select to extend

[cuTting

edges/Crossing/mOde/Project/eRase/Undo]: Select object to trim or shift-select to extend

or · -

[cuTting

edges/Crossing/mOde/Project/eRase/Undo]: Select object to trim or shift-select to extend

or

[cuTting

edges/Crossing/mOde/Project/eRase/Undo]:

Select objects:

Specify first point of mirror line: Specify second point of mirror line:

Invalid 2D point.

Specify second point of mirror line: \*Cancel\*

Command: MI MIRROR

Select objects: 1 found Select objects: 1 found, 2 total

Select objects:

Specify first point of mirror line: Specify second point of mirror line:

[cuTting

edges/Crossing/mOde/Project/eRase/Undo]: Select object to trim or shift-select to extend

cuTting

edges/Crossing/mOde/Project/eRase/Undo]: Select object to trim or shift-select to extend

or

[cuTting

edges/Crossing/mOde/Project/eRase/Undo]:

\*Cancel\*
Command:

Command: <Switching to: Layout1>

Regenerating layout. Regenerating layout.

Regenerating model - caching viewports. Command: Specify opposite corner or

[Fence/WPolygon/CPolygon]:

Command: \*Cancel\* Command: \_.MSPACE

Select object to trim or shift-select to extend

or

Command:

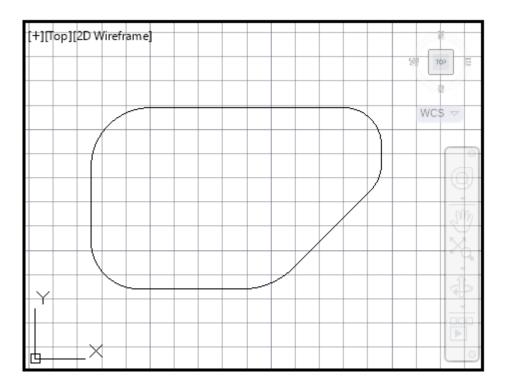
Press ESC or ENTER to exit, or right-click to

display shortcut menu. Command: \_.PSPACE

Command: Automatic save to

C:\Users\fahim\AppData\Local\Temp\lab 06 1 15560 c9cd3709.sv\$ ...

## Task 2:



# **Procedure:**

- Draw a rectangle of length 120 units and width 75 units
- Fillet the top left and bottom left corner with radius 25 units and 20 units respectively
- Champher the bottom right corner with angle 45 degree
- Fillet the top right and bottom right corner with radius 15 and 30 units respectively
- Trim the unwanted parts from the figure

Command: RE	Select second object or shift-select	Command: Specify opposite corner or
REGEN Regenerating model.	to apply corner or [Radius]:	[Fence/WPolygon/CPolygon]: *Cancel*
Command: *Cancel*	Command: *Cancel*	Command:
Command: REC	Command: FILLET	Press ESC or ENTER to exit, or right-click to
RECTANG	Current settings: Mode = NOTRIM,	display shortcut menu.
Specify first corner point or	Radius = 25.0000	Command: CHA
[Chamfer/Elevation/Fillet/Thickness/	Select first object or	CHAMFER
Width]:	[Undo/Polyline/Radius/Trim/Multipl	(NOTRIM mode) Current chamfer Dist1 =
Specify other corner point or	e]: r	0.0000, Dist2 = 0.0000
[Area/Dimensions/Rotation]: d	Specify fillet radius <25.0000>: 20	Select first line or
Specify length for rectangles	Select first object or	[Undo/Polyline/Distance/Angle/Trim/mEthod/
<10.0000>: 120	[Undo/Polyline/Radius/Trim/Multipl	Multiple]: a
Specify width for rectangles	e]:	Specify chamfer length on the first line
<10.0000>: 75	Select second object or shift-select	<0.0000>: 45
Specify other corner point or	to apply corner or [Radius]:	Specify chamfer angle from the first line <0>:
[Area/Dimensions/Rotation]:	Command: FILLET	45

Crossing Lasso Press Spacebar to

cycle options Command:

Press ESC or ENTER to exit, or rightclick to display shortcut menu.

Command: F FILLET

Current settings: Mode = NOTRIM,

Radius = 30.0000 Select first object or

[Undo/Polyline/Radius/Trim/Multipl

e]: r

Specify fillet radius <30.0000>: 15

Select first object or Select first object or

[Undo/Polyline/Radius/Trim/Multipl

e]: r

Specify fillet radius <33.0000>: 25

Select first object or

[Undo/Polyline/Radius/Trim/Multipl

e]:

[Undo/Polyline/Radius/Trim/Multipl

e]:

Select second object or shift-select to apply corner or [Radius]:

Command: \*Cancel\*
Command: TR

TRIM

Current settings: Projection=View,

Edge=None, Mode=Quick

Select object to trim or shift-select to

extend or [cuTting

edges/Crossing/mOde/Project/eRase

]:

Select object to trim or shift-select to

extend or [cuTting

edges/Crossing/mOde/Project/eRase

/Undol:

Specify next fence point or [Undo]: Specify next fence point or [Undo]: Select object to trim or shift-select to

extend or

[cuTting

edges/Crossing/mOde/Project/eRase

/Undo]:

Select object to trim or shift-select to

extend or [cuTting

edges/Crossing/mOde/Project/eRase

/Undo]:

Select object to trim or shift-select to

extend or

Command: \*Cancel\* Select first object or

[Undo/Polyline/Radius/Trim/Multipl

el:

Select second object or shift-select

to apply corner or [Radius]:

Select second object or shift-select

to apply corner or [Radius]: Command: \*Cancel\* Command: CH PROPERTIES [cuTting

edges/Crossing/mOde/Project/eRase

/Undo]:

Select object to trim or shift-select to

extend or [cuTting

edges/Crossing/mOde/Project/eRase

/Undo]:

Select object to trim or shift-select to

extend or [cuTting

edges/Crossing/mOde/Project/eRase

/Undol·

Select object to trim or shift-select to

extend or [cuTting

edges/Crossing/mOde/Project/eRase

/Undo]:

Select object to trim or shift-select to

extend or

Command: <Switching to: Layout1>

Regenerating layout.

Regenerating model - caching viewports.
Command: Specify opposite corner or
[Fence/WPolygon/CPolygon]: \*Cancel\*

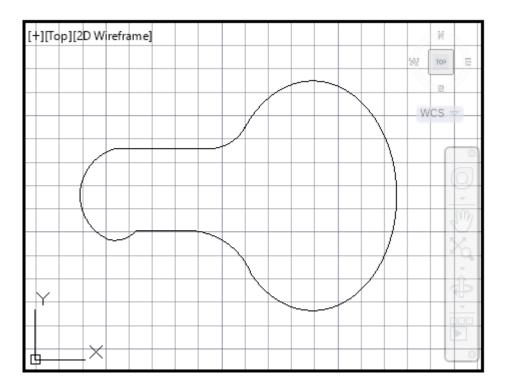
Command: \_.MSPACE

Command:

Press ESC or ENTER to exit, or right-click to

display shortcut menu.

## Task 3:



## **Procedure:**

- Draw a line of line of 85 units
- Draw a polygon of 36 units at right and 15 units at left
- Offset the line with distance 20 on both sides
- Fillet the both the polygon with the line
- Trim the unwanted parts from the diagram

Command: I	Command: _arc	FILLET
LINE	Specify start point of arc or [Center]:	Current settings: Mode = NOTRIM,
Specify first point: 85	Specify second point of arc or	Radius = 15.0000
Specify next point or [Undo]:	[Center/End]: _e	Select first object or
Specify next point or [Undo]: *Cancel*	Specify end point of arc:	[Undo/Polyline/Radius/Trim/Multiple]: r
Command: LINE	Specify center point of arc (hold Ctrl to	Specify fillet radius <15.0000>: 18
Specify first point:	switch direction) or	Select first object or
Specify next point or [Undo]: 85	[Angle/Direction/Radius]: _a	[Undo/Polyline/Radius/Trim/Multiple]:
Specify next point or [Undo]: *Cancel*	Specify included angle (hold Ctrl to	Select second object or shift-select to
Command: o	switch direction): 15	apply corner or [Radius]:
OFFSET	Command:	Command:
Current settings: Erase source=No	Command:	Command:
Layer=Source OFFSETGAPTYPE=0	** STRETCH **	** STRETCH **
Specify offset distance or	Specify stretch point or [Base	Specify stretch point or [Base
[Through/Erase/Layer] <through>: 20</through>	point/Copy/Undo/eXit]:	point/Copy/Undo/eXit]:

Select object to offset or [Exit/Undo]

Command: \*\* STRETCH \*\*

Specify stretch point or [Base point/Copy/Undo/eXit]: \*Cancel\* Command: Specify opposite corner or [Fence/WPolygon/CPolygon]: \*Cancel\*

Command: f

Current settings: Mode = NOTRIM,

Radius = 15.0000 Select first object or

[Undo/Polyline/Radius/Trim/Multiple]: r Specify fillet radius <15.0000>: 18

Select first object or

[Undo/Polyline/Radius/Trim/Multiple]: Select second object or shift-select to

apply corner or [Radius]:

Command: L

LINE

Specify first point:

Specify next point or [Undo]:

Specify next point or [Undo]: \*Cancel\*

Command: FILLET

Current settings: Mode = NOTRIM,

Radius = 18.0000 Select first object or

No valid fillet with radius 43.0000 Select second object or shift-select to

apply corner or [Radius]:

Command: \_pline Specify start point:

Current line-width is 0.0000

[cuTting

edges/Crossing/mOde/Project/eRase/U

ndo]:

Select object to trim or shift-select to

extend or

Select object to trim or shift-select to

extend or
\*\* STRETCH \*\*

Specify stretch point or [Base point/Copy/Undo/eXit]: Command: \*Cancel\* Command: TR

TRIM

Current settings: Projection=View,

Edge=None, Mode=Quick

Command: \*Cancel\*

Command:

Press ESC or ENTER to exit, or right-click

to display shortcut menu.

Command: c

Specify center point for circle or

[3P/2P/Ttr (tan tan radius)]:

Specify radius of circle or [Diameter]:

Command: F Specify next point or

[Arc/Close/Halfwidth/Length/Undo/Wid

th]:

Command:

\*\* STRETCH \*\*

Specify stretch point or [Base point/Copy/Undo/eXit]:

Command: Specify opposite corner or [Fence/WPolygon/CPolygon]: \*Cancel\*

Command: \*Cancel\*
Command: FILLET

Current settings: Mode = NOTRIM,

Radius = 43.0000 Select first object or

[Undo/Polyline/Radius/Trim/Multiple]: r Specify fillet radius <43.0000>: 43

Select first object or

[Undo/Polyline/Radius/Trim/Multiple]: Select second object or shift-select to

apply corner or [Radius]:

TRIM

Current settings: Projection=View,

Edge=None, Mode=Quick

Select object to trim or shift-select to

extend or [cuTting

edges/Crossing/mOde/Project/eRase]: Select object to trim or shift-select to

extend or [cuTting

edges/Crossing/mOde/Project/eRase/U

ndo]: \*Cancel\* Command:

Press ESC or ENTER to exit, or right-click

to display shortcut menu.
Command: \*Cancel\*

Command: <Switching to: Layout1>

Restoring cached viewports -

Regenerating layout.

Command: \*Cancel\*

Command: \_u Grip Edit Command: \_u FILLET

Command: u INTELLIZOOM

INTELLIZOOM

Crossing Lasso Press Spacebar to cycle

options

Press ESC or ENTER to exit, or right-click

to display shortcut menu.

\*\* STRETCH \*\*
Specify next point or

[Arc/Halfwidth/Length/Undo/Width]:

<Ortho off>

Specify next point or

[Arc/Close/Halfwidth/Length/Undo/Wid

th]:

Specify stretch point or [Base point/Copy/Undo/eXit]:

Command:

\*\* STRETCH \*\*

Specify stretch point or [Base point/Copy/Undo/eXit]:

Command: Specify opposite corner or [Fence/WPolygon/CPolygon]: \*Cancel\*

Command: \*Cancel\* Command: TR

**TRIM** 

Current settings: Projection=View,

Edge=None, Mode=Quick

Select object to trim or shift-select to

extend or [cuTting

edges/Crossing/mOde/Project/eRase/U

ndo]

Select object to trim or shift-select to

extend or

Select object to trim or shift-select to

extend or [cuTting

edges/Crossing/mOde/Project/eRase/U

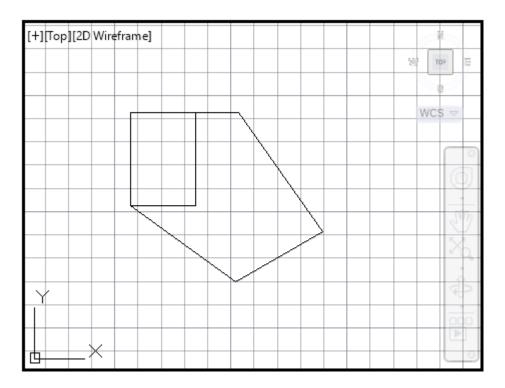
ndo]: [cuTting

edges/Crossing/mOde/Project/eRase/U

ndo]: \*Cancel\*
Command:
Command:
\*\* STRETCH \*\*

Specify stretch point or [Base point/Copy/Undo/eXit]:

## Task 4:



## **Procedure:**

- Draw two lines of 40, 40 units perpendicularly
- Draw line of 40 with angle of 45 degree at bottom line
- Draw another line of 60 units with angle of 105 degree
- Draw perpendicular line to the previous line and join to the first line

Command: I	Select object to trim or shift-select to extend	** STRETCH **
LINE	or	Specify stretch point or [Base
Specify first point:	[cuTting	point/Copy/Undo/eXit]: <polar on=""></polar>
Specify next point or [Undo]:	edges/Crossing/mOde/Project/eRase]:	Command: *Cancel*
40	Select object to trim or shift-select to extend	Command:
Specify next point or [Undo]:	or	Command:
*Cancel*	[cuTting	Specify stretch point or [Base
Command: LINE	edges/Crossing/mOde/Project/eRase/Undo]:	point/Copy/Undo/eXit]:
Specify first point:	*Cancel*	Command: *Cancel*
Specify next point or [Undo]:	Command: o	Command:
40	OFFSET	Command:
Specify next point or [Undo]:	Current settings: Erase source=No	** STRETCH **
<polar on=""> 40</polar>	Layer=Source OFFSETGAPTYPE=0	Specify stretch point or [Base
		point/Copy/Undo/eXit]:

Specify next point or [Close/Undo]: 60
Specify next point or [Close/Undo]: <Ortho on>

<Ortho off> <Polar on>
Specify next point or

[Close/Undo]:

Specify next point or [Close/Undo]: \*Cancel\*

Command: Command:

\*\* STRETCH \*\*
Specify stretch point or [Base

point/Copy/Undo/eXit]: <Ortho on> \*Cancel\*

Command:
\*\* STRETCH \*\*
Specify stretch point or [Base

point/Copy/Undo/eXit]: Command: \*Cancel\* Command: tr

TRIM

Current settings:

Projection=View, Edge=None,

Mode=Quick
\*\* STRETCH \*\*

Specify stretch point or [Base point/Copy/Undo/eXit]: Command: \*Cancel\*

Command:
\*\* STRETCH \*\*

Specify stretch point or [Base point/Copy/Undo/eXit]:

Command: Specify opposite corner or

[Fence/WPolygon/CPolygon]:

\*Cancel\*
Command:
\*\* STRETCH \*\*

Specify stretch point or [Base point/Copy/Undo/eXit]:

Command:

Specify offset distance or

[Through/Erase/Layer] <Through>: 40 Select object to offset or [Exit/Undo] <Exit>: Specify point on side to offset or

Specify point on side to offset o [Exit/Multiple/Undo] <Exit>:

Select object to offset or [Exit/Undo] <Exit>:

\*Cancel\* Command: I LINE

Specify first point:

Specify next point or [Undo]:

Specify next point or [Undo]: \*Cancel\*

Command:

Press ESC or ENTER to exit, or right-click to

display shortcut menu.

Command: Command: [cuTting

edges/Crossing/mOde/Project/eRase/Undo]: Select object to trim or shift-select to extend

or [cuTting

edges/Crossing/mOde/Project/eRase/Undo]:

\*Cancel\*
Command:
Command:
\*\* STRETCH \*\*

Specify stretch point or [Base point/Copy/Undo/eXit]: Command: \*Cancel\*

Command: <Switching to: Layout1>
Restoring cached viewports - Regenerating

layout.

Regenerating 8 modified entities. Command: Specify opposite corner or

[Fence/WPolygon/CPolygon]:

Command:

Press ESC or ENTER to exit, or right-click to

display shortcut menu.

Command: Automatic save to Command: \*Cancel\*

Command:

Press ESC or ENTER to exit, or right-click to

display shortcut menu. Command: \*Cancel\*

Specify stretch point or [Base point/Copy/Undo/eXit]: Command: \*Cancel\*
Command: tr

TRIM

Current settings: Projection=View,

Edge=None, Mode=Quick

Select object to trim or shift-select to extend

or

[cuTting

edges/Crossing/mOde/Project/eRase]: Select object to trim or shift-select to extend

or

[cuTting

edges/Crossing/mOde/Project/eRase/Undo]: Select object to trim or shift-select to extend

or

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