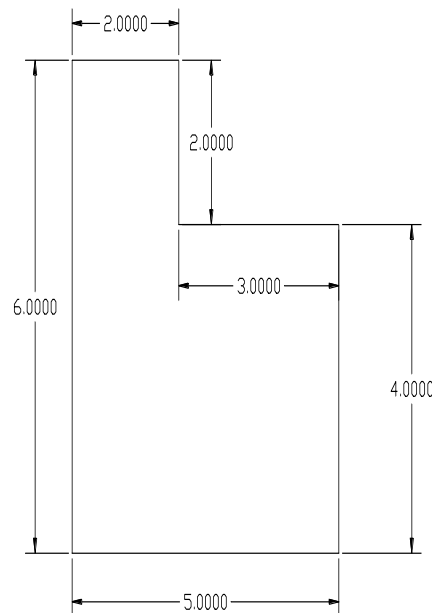# Lab #01

Objective: Understanding the co-ordinate system and implementing it with different Modes.

Exercise #01: Create the given drawing by using:

- o **Absolute coordinate's entry mode.**

- o **Polar coordinates entry mode.**

- o **Relative coordinate's entry mode.**

- • **Absolute coordinate's entry mode:**

  Commands:

  Command:LINE
  Specify first point: 5,1.5
  Specify next point or [Undo]: 10,1.5
  Specify next point or [Undo]: 10,5.5
  Specify next point or [Close/Undo]: 7,5.5
  Specify next point or [Close/Undo]: 7,7.5
  Specify next point or [Close/Undo]: 5,7.5
  Specify next point or [Close/Undo]: close
  Command: DIMLINEAR
  Specify first extension line origin or <select object>: 5,1.5
  Specify second extension line origin: 10,1.5
  Non-associative dimension created.
  Specify dimension line location or
  [Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
  Dimension text = 5.0000
  Command: DIMLINEAR
  Specify first extension line origin or <select object>: 10,1.5
  Specify second extension line origin: 10,5.5
  Non-associative dimension created.
  Specify dimension line location or
  [Mtext/Text/Angle/Horizontal/Vertical/Rotated]:

Dimension text = 4.0000
Command: DIMLINEAR
Specify first extension line origin or <select object>: 10,5.5
Specify second extension line origin: 7,5.5
Non-associative dimension created.
Specify dimension line location or
[Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
Dimension text = 3.0000
Command: DIMLINEAR
Specify first extension line origin or <select object>: 7,5.5
Specify second extension line origin: 7,7.5
Non-associative dimension created.
Specify dimension line location or
[Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
Dimension text = 2.0000
Command: DIMLINEAR
Specify first extension line origin or <select object>: 7,7.5
Specify second extension line origin: 5,7.5
Non-associative dimension created.
Specify dimension line location or
[Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
Dimension text = 2.0000
Command: DIMLINEAR
Specify first extension line origin or <select object>: 5,7.5
Specify second extension line origin: 5,1.5
Non-associative dimension created.
Specify dimension line location or
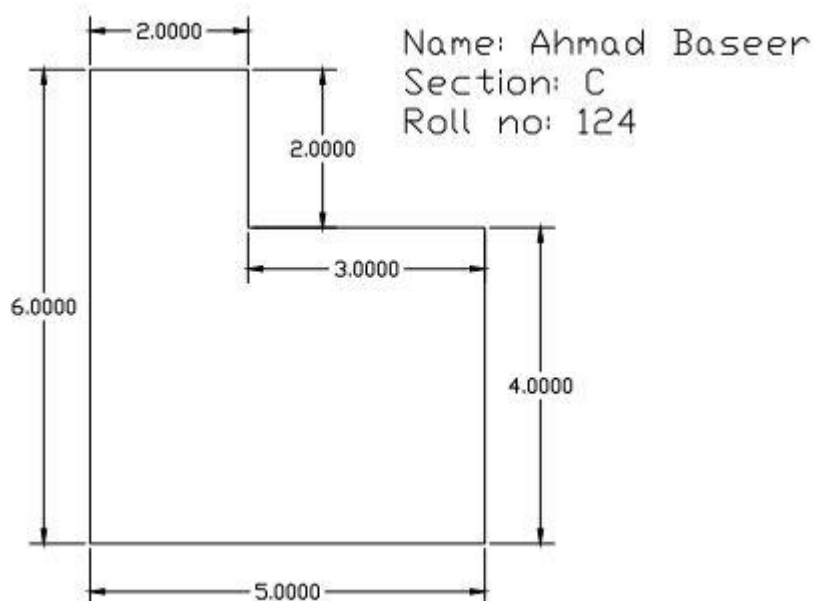[Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
Dimension text = 6.0000
Command: MTEXT
Current text style: "Standard" Text height: 0.2000 Annotative: No
Specify first corner: 9,8
Specify opposite corner or [Height/Justify/Line spacing/Rotation/Style/Width/Columns]: 14.5,6.

Output Drawing:

- **Relative coordinate's entry mode:**

  Commands:

  command:LINE
  Specify first point: 5,0.5
  Specify next point or [Undo]: @5,0
  Specify next point or [Undo]: @0,4
  Specify next point or [Close/Undo]: @-3,0
  Specify next point or [Close/Undo]: @0,2
  Specify next point or [Close/Undo]: @-2,0
  Specify next point or [Close/Undo]: close
  Command: DIMLINEAR
  Specify first extension line origin or <select object>: 5,0.5
  Specify second extension line origin: 10,0.5
  Non-associative dimension created.
  Specify dimension line location or
  [Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
  Dimension text = 5.0000
  Command: DIMLINEAR
  Specify first extension line origin or <select object>: 10,0.5
  Specify second extension line origin: 10,4.5
  Non-associative dimension created.
  Specify dimension line location or
  [Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
  Dimension text = 4.0000
  Command: DIMLINEAR
  Specify first extension line origin or <select object>: 10,4.5
  Specify second extension line origin: 7,4.5
  Non-associative dimension created.
  Specify dimension line location or
  [Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
  Dimension text = 3.0000
  Command: DIMLINEAR
  Specify first extension line origin or <select object>: 7,4.5
  Specify second extension line origin: 7,6.5
  Non-associative dimension created.
  Specify dimension line location or
  [Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
  Dimension text = 2.0000
  Command: DIMLINEAR
  Specify first extension line origin or <select object>: 7,6.5
  Specify second extension line origin: 5,6.5
  Non-associative dimension created.
  Specify dimension line location or
  [Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
  Dimension text = 2.0000
  Command: DIMLINEAR
  Specify first extension line origin or <select object>: 5,6.5
  Specify second extension line origin: 5,0.5
  Non-associative dimension created.
  Specify dimension line location or
  [Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
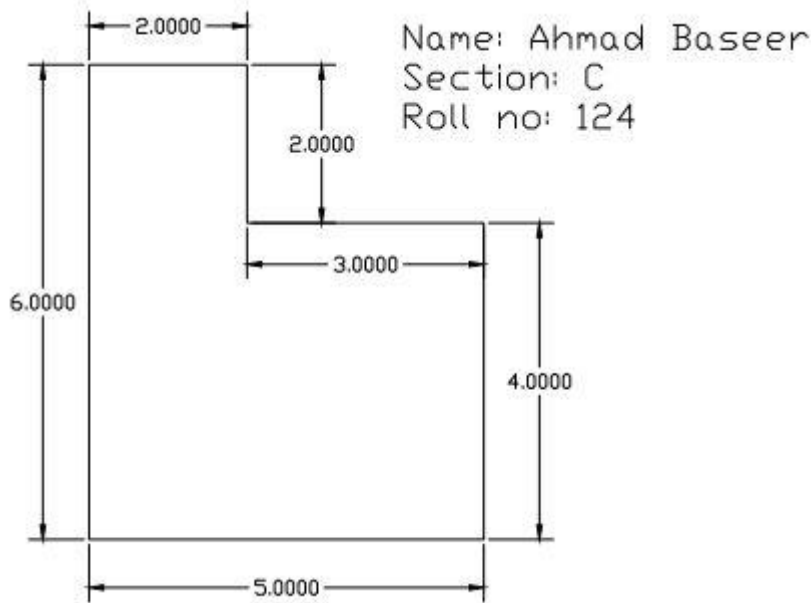 Dimension text = 6.0000
  Command: MTEXT
  Current text style: "Standard" Text height: 0.2000 Annotative: No

Specify first corner: 9.5,7
Specify opposite corner or [Height/Justify/Line spacing/Rotation/Style/Width/Columns]: 15.5,4.7.

Output drawing:

- **Polar coordinate's entry mode:**

    Commands:

    command:LINE
    Specify first point: 5,0.5
    Specify next point or [Undo]: @5<0
    Specify next point or [Undo]: @4<90
    Specify next point or [Close/Undo]: @3<180
    Specify next point or [Close/Undo]: @2<90
    Specify next point or [Close/Undo]: @2<180
    Specify next point or [Close/Undo]: @6<270
    Specify next point or [Close/Undo]: *Cancel*
    Command: DIM
    Select objects or specify first extension line origin or [Angular/Baseline/Continue/Undo]:A
    Select arc, circle, line or [Vertex]:
    Select line to specify second side of angle:
    Select objects or specify first extension line origin or [Angular/Baseline/Continue/Undo]:A
    Select arc, circle, line or [Vertex]:
    (2)Select line to specify second side of angle:
    Select objects or specify first extension line origin or [Angular/Baseline/Continue/Undo]:A
    Select arc, circle, line or [Vertex]:
    (3)Select line to specify second side of angle:
    Select objects or specify first extension line origin or [Angular/Baseline/Continue/Undo]:A
    Select arc, circle, line or [Vertex]:
    (4)Select line to specify second side of angle:
    Command: *Cancel*
    Command: DIMLINEAR
    Specify first extension line origin or <select object>: 5,0.5
    Specify second extension line origin: 10,0.5
    Non-associative dimension created.
    Specify dimension line location or
    [Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
    Dimension text = 5.0000
    Command: DIMLINEAR
    Specify first extension line origin or <select object>: 10,0.5

Specify second extension line origin: 10,4.5
Non-associative dimension created.
Specify dimension line location or
[Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
Dimension text = 4.0000
Command: DIMLINEAR
Specify first extension line origin or <select object>: 10,4.5
Specify second extension line origin: 7,4.5
Non-associative dimension created.
Specify dimension line location or
[Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
Dimension text = 3.0000
Command: DIMLINEAR
Specify first extension line origin or <select object>: 7,4.5
Specify second extension line origin: 7,6.5
Non-associative dimension created.
Specify dimension line location or
[Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
Dimension text = 2.0000
Command: DIMLINEAR
Specify first extension line origin or <select object>: 7,6.5
Specify second extension line origin: 5,6.5
Non-associative dimension created.
Specify dimension line location or
[Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
Dimension text = 2.0000
Command: DIMLINEAR
Specify first extension line origin or <select object>: 5,6.5
Specify second extension line origin: 5,0.5
Non-associative dimension created.
Specify dimension line location or
[Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
Dimension text = 6.0000
Command: MTEXT
Current text style: "Standard" Text height: 0.2000 Annotative: No
Specify first corner: 9.5,7.5
Specify opposite corner or [Height/Justify/Line spacing/Rotation/Style/Width/Columns]: 16,5
Output Drawing: