**Question #2:**

**IPO CHART:**

|  |  |  |
| --- | --- | --- |
| **INPUT** | **PROCESSING** | **OUTPUT** |
| **Enter value of x and y** | **Compare value of x and y.**  **Determine the Position:**  **Origin if x=y=0,**  **Quad I if x>0 and y>0,**  **Quad II if x<0 and y>0,**  **Quad III if x<0 and y<0,**  **Quad IV if x>0 and y<0.** | **Display points position.**  **{Origin or Quadrant (I/II/III/IV)}** |

**PAC CHART:**

|  |  |
| --- | --- |
| **INPUT** | **REQUIRED RESULTS** |
| **Enter value of x and y** | **Points position.**  **{Origin or Quadrant (I/II/III/IV)}** |
| **REQUIRED PROCESSING** | **SOLUTION ALTERNATIVES** |
| **Origin if x=y=0,**  **Quad I if x>0 and y>0,**  **Quad II if x<0 and y>0,**  **Quad III if x<0 and y<0,**  **Quad IV if x>0 and y<0.** | **Define the x-axis and y-axis as Input values.**  **Declare x-axis and y-axis as Float Values.** |

**IC CHART:**

CONTROL

PRINT

Initialise

x-axis

y-axis Quadrant 1 Quadrant 2 Quadrant 3 Quadrant 4

**Algorithm:**

Start

ENTER value of x, y

IF (x=0 AND y=0)

THEN

PRINT "Point is on origin"

ELSE IF (y=0) THEN

PRINT "Point lies on x intercept "

ELSE IF (x=0) THEN

PRINT "Point lies on y intercept"

ELSE IF (x>0 AND y>0) THEN

PRINT "Point lies in Quadrant I"

ELSE IF (x<0 AND y>0) THEN

PRINT "Point lies in Quadrant II"

ELSE IF (x<0 AND y<0) THEN

PRINT "Point lies in Quadrant III"

ELSE IF (x>0 AND y<0) THEN

PRINT "Point lies in Quadrant IV"

ENDIF

END

**FLOWCHART:**

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AI-generated content may be incorrect.**

**C CODE:**

A computer screen with white text

AI-generated content may be incorrect.