*PAC CHART*

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| **GIVEN DATA** | **REQUIRED RESULT** |
| * X-COORDINATES OF POINT * Y-COORDINATES OF POINT | IN WHICH QUADRANT DO THE POINT LIES |
| **PROCESSING REQUIRED** | **SOLUTION ALTERNATIVES** |
| * CHECK SIGN OF X-COORDINATE * CHECK SIGN OF Y-COORDINATE * CHECK SIGNS TO TELL THE QUADRANTS :-  1. IF X AND Y BOTH ARE POSITIVE THEN FIRST QUAD. 2. IF X IS NEGATIVE AND Y IS POSITIVE THEN SECOND QUAD. 3. IF X AND Y BOTH ARE NEGATIVE THEN THIRD QUAD. 4. IF X IS POSITIVE BUT Y IS NEGATIVE THEN FOURTH QUAD. | * THE X AND Y COORDINATES GIVEN BY USER MIGHT BE DIFFERENT * IF X AND Y BOTH ARE ZERO THEN THEY LIE AT ORIGIN * IF ANY OF ONE X AND Y COORDINATE ARE ZERO THEN THE POINT LIES EITHER ON X-AXIS OR Y-AXIS |

*IPO CHART*

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| **INPUT** | **PROCESS** | **MODULE**  **REFERENCE** | **OUTPUT** |
| * X-COORDINATE * Y-COORDINATE | * ENTER X * ENTER Y * IF X AND Y BOTH POSITIVE , OUTPUT QUAD  I * IF X IS NEGATIVE AND Y IS POSITIVE , OUTPUT QUAD  II * IF X AND Y BOTH NEGATIVE ,   OUTPUT QUAD III   * IF X IS POSITIVE AND Y IS NEGATIVE ,   OUTPUT QUAD IV   * OTHERWISE OUTPUT AXES | * INPUT * INPUT * IF * PRINT * ELSEIF * PRINT * ELSEIF * PRINT * ELSEIF * PRINT * ELSE * PRINT | * QUADRANTS IN WHICH COORDINATES OF X AND Y LIE |