**PAC CHART**

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| **GIVEN DATA** | **REQUIRED RESULT** |
| * SERIES OF DIGITS | * Count and output the number of occurrences of each digit between 0 and 9 |
| **PROCESSING** | **SOLUTION ALTERNATIVES** |
| * KEEPING SEPARATE VARIABLE COUNTER FOR EACH DIGIT * INITIALIZE EACH COUNTER TO ZERO * ASK THE NUMBER TO ENTER A NUMBER * CHECK IF THE NUMBER IS BETWEEN 0-9 BOTH INCLUSIVE * IF YES THEN INCREMENT THE CORESPONDING COUNTER AND MOVE BACK TO STEP 3 ASKING USER TO ENTER NUMBER * OTHERWISE, OUTPUT EACH NUMBER FROM 0-9 WITH NUMBER OF TIME IT WAS ENTERED. | * Use an array to store counters instead of creating separate variables for each digit * Stop the program when the entered value is not within the range 0–9 |

**IPO CHART**

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| **INPUT** | **PROCESSING** | **MODULE REFERENCE** | **OUTPUT** |
| * DIGITS | * INITIALIZE 10 COUNTER WITH 0 * START THE LOOP * TAKE NUMBER AS INPUT * CHECK IF NUMBER IS BETWEEN 0-9 * INCREMENT COUNTER IF IT IS * EXIT LOOP OTHERWISE * OUTPUT EACH COUNTER ALONG WITH CORRESPONDING NUMBER | * SET * REPEAT * INPUT * IF-ELSEIF * INC * UNTIL * PRINT | * HOW MANY TIMES EACH NUMBER WAS ENTERED |