

Q1 create PAC charts

Given Data

denomination available
quantity of each denomination

Processing required

start with higher denominations
add to make the sum
use smaller denominations if
can not exceeds target.

$$\text{e.g. } \$10 \times 7 = 70$$

$$\$5 \times 1 = 5$$

$$1C \times 43 = 43C$$

$$\$70 + \$5 + 43C = \$75.43$$

Required results

exact amount = 75.43 USD

Alternative solution

Start with smaller denomination
and add larger ones if amount
is less than target.

Q.2)

Given Data

num 1, num 2,
num 3

Required results

largest number

Processing required

Alternative

→ If $\text{num } 1 > \text{num } 2$ & $\text{num } 1 > \text{num } 3$
then num 1 is larger

Take difference b/w 2 sets of
number, the one with positive
one with both 2 one number
is largest

→ If $\text{num } 2 > \text{num } 3$ and $\text{num } 2 > \text{num } 1$
then num 2 is larger

→ If $\text{num } 3 > \text{num } 1$ & $\text{num } 3 > \text{num } 2$
then num 3 is larger

Date: _____

Q3)

Given data

- Number
- digits

Required Result

sum of digits

Processing required

$sum = 0$, $num > 0$
Cal $a = (num / 10^{n-1}) \% 10$
 $sum = sum + a$
 $n = n - 1$
untill $n = 1$

Alternative result

if number is -ive ignore
 $num = -(num)$
and just add for sum

Q) Find whether a given number is even or odd.
 Alternatively, the user would take two numbers as input, multiply them and then determine if it is an odd or Even number.

Given Data

- 1) Any number
- 2) two numbers for xing

Required result

number is even or odd.

Processing

calculate Even or odd

$$\text{number} \div 2$$

If remainder = 0 = even
 else, odd

Alternate

For two numbers

$$\text{num1} \times \text{num2}$$

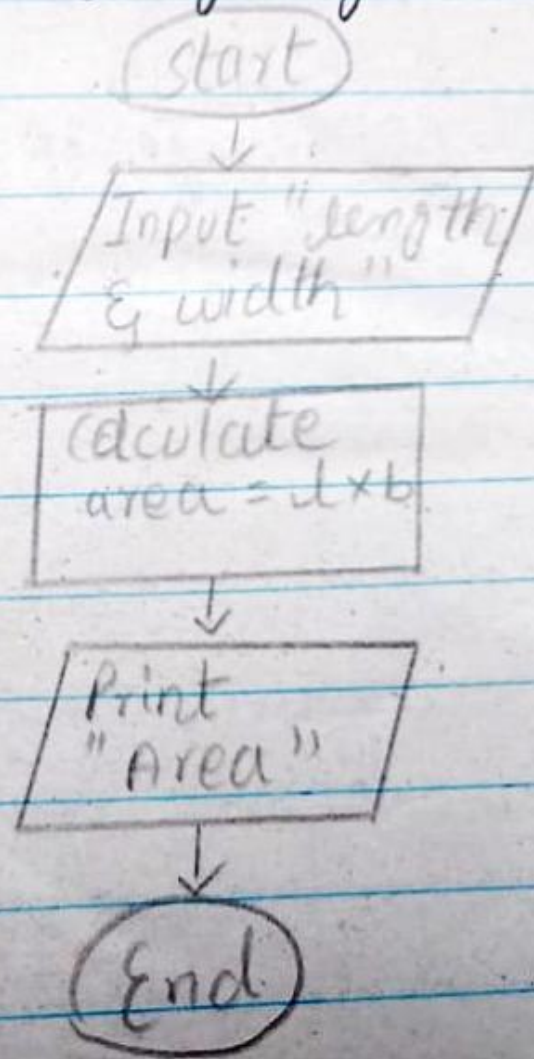
If $\frac{\text{num1} \times \text{num2}}{2} = \text{Even}$

Else odd

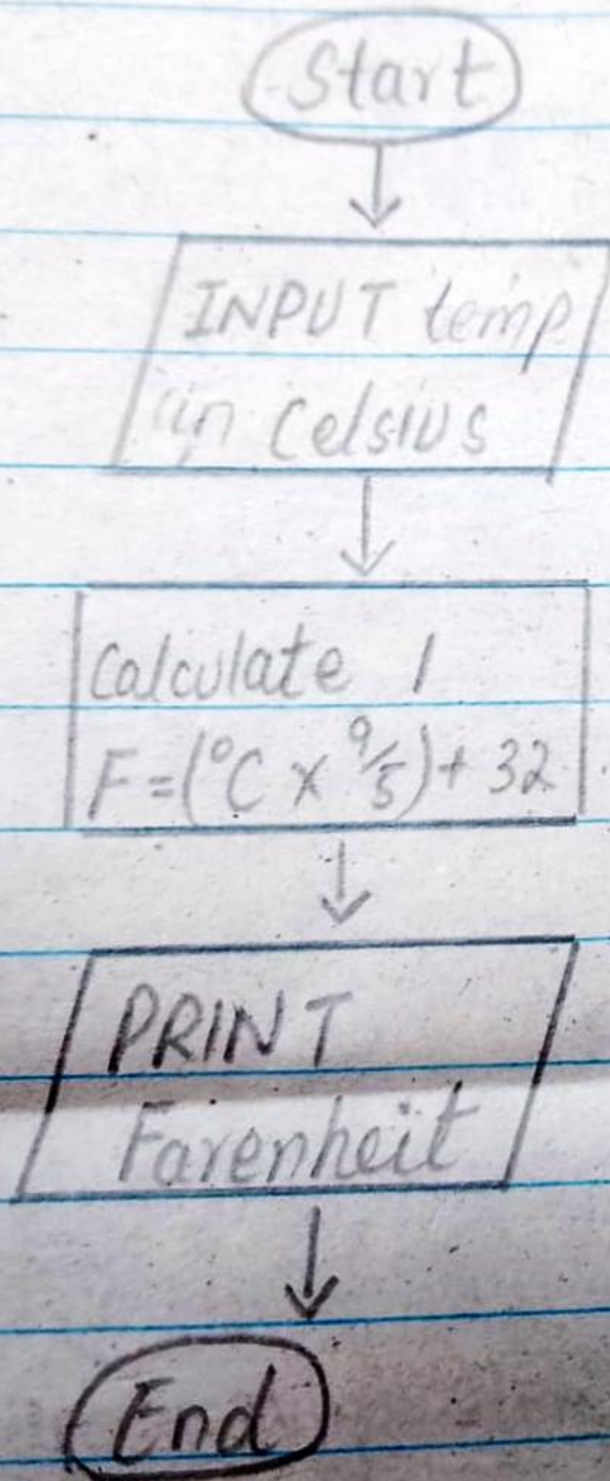
1 IPO chart

Input	Process	Module	Output
Single number	1) Read "number" → calculate $Eor\ D = \frac{number}{2}$ → If remainder = 0 PRINT "Even" → else, PRINT "odd" → End	Read Calculate PRINT End	The number is even or odd.
Two numbers	2) Read "Two num" calculate for $D = num1 \times num2$ If result divisible by 2 PRINT "even" else "odd"	Read Calculate PRINT End	The number is even or odd.

Q) Calculate the area of a rectangle given its length and width.



Q) Convert a temperature from Celsius to Fahrenheit.



Q8)

Start



Input n_1, n_2, n_3



Calculate average
$$\frac{n_1 + n_2 + n_3}{3}$$



Print "average"



End