PF-LAB 01

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PROBLEM SOLVING : 2

TASK : 1 ;

Yes, there is more than one correct answer because we have different bills that could add upto 75.43 $ in different ways.

TASK : 2 ;

The goal is to withdraw 75.43 $ from the cash register and the input is the available denomination in the cash register.

TASK : 3 ;

To find the most efficient bills that sums upto 75.43 $.

TASK : 4 ;

STEP 1 => look at all the available bills.
STEP 2 => First take the big bills then small that adds upto 75 $.
STEP 3 => Then take coins that adds upto 43 C.
STEP 4 => Add altogether to get 75.43 $ then withdraw it.

TASK: 5;

Yes ofcourse it can be used for 89.23 $

STEP: 1 => 1 x 20 $ bill = 20 $

STEP: 2 => 3 x 10 $ bill = 30 $

STEP: 3 => 5 x 5 $ bill = 25 $

STEP: 4 => 1 x 2 $ bill = 2 $

STEP: 5 => 12 x 1 $ bill = 12 $

STEP: 6 => 10 x 2 C = 20 C

STEP: 7 => 1 x 3 C = 3 C

STEP: 8 => Sum all = 89.23 $

TASK : 6 :

i) Start by taking bills that adds up exactly to 75 $.
ii) Then take coins that sums upto 43 C.
iii) Then add them together and check if you have the right amount 75.43 $.
iv) If yes then withdraw it.

TASK : 7 :

Yes these step will lead us to correct answer as shown in Task no. 4.

PAC CHART

TASK 2 :

GIVEN DATA	REQUIRED RESULT
Input n_1 Input n_2 Input n_3	To Find Greatest of 3 numbers.
PROCESSING RESULTS	**SOLUTION ALTERNATIVES**
If $n_2 > n_2, n_1$ then print n_1. If $n_2 > n_1, n_1$ then print n_2. If $n_3 > n_1, n_2$ then print n_3.	Comparing n_1 and n_2, determine the larger value then compare with n_3, then determine largest value.

Date:

Task 1:

Given Data	Required Result
70 x 1 $ bill	Required amount to withdraw 75.43 $
1 x 2 $ bill	
5 x 5 $ bill	
3 x 20 $ bill	
1 x 20 $ bill	
0 x 50 $ bill	
10 x 1 Coin	
5 x 10 Coin	
2 x 25 Coin	
150 x 50 coins	
5 x 5 Coins	
Processing Results	**Solution Alternatives**
1 x 20 $ => 20 $	Use a different set of bills and coins that adds upto 75.43 $
3 x 10 $ => 30 $	
5 x 5 $ = 25 $	
4 x 10 $ = 40 C.	
3 x 1 C = 3 C	
Total = 75.43 $	

Date:

Task 3:

Given Data	Required Result
Number 1 => $n_1 = 1$ Number 2 => $n_2 = 2$ Number 3 => $n_3 = 3$ Number 4 => $n_4 = 4$ Number 5 => $n_5 = 5$	To calculate the sum.
Processing Result	**Solution Alternatives**
Sum = $n_1 + n_2 + n_3 + n_4 + n_5$	Sum = 1+2+3+4+5 = 15

Task 4:

Given Data	Required Result
Given number (n)	To check if number is prime or not.
Processing Result	**Solution Alternatives**
If the number (n) is only divisible by itself or only by 1 then it's prime.	$\frac{n}{n}$ or $\frac{n}{1}$

Task 5:

Given Data	Required Result
Given numbers n_1, n_2, n_3 n_4 and n_5	To check if it's panidrome or not.
Processing Result	**Solution Alternatives**
Arrange them in order $n_1\ n_2\ n_3\ n_4\ n_5$ ~~If~~ $n_1 = n_5$, $n_2 = n_4$ $n_3 = n_3$ it's panidrome.	Read it from n_1 to n_5 then n_5 to n_1 if it's same then it's ~~panidrom~~ panidrome.

Task 6:

Given Data	Required Result
Given number (n).	To find if it's even or odd
Processing Result	**Solution Alternatives**
Divide n by 2 and if remainder is whole no. it's even.	Divide n by and if remainder is in fraction then it's odd.

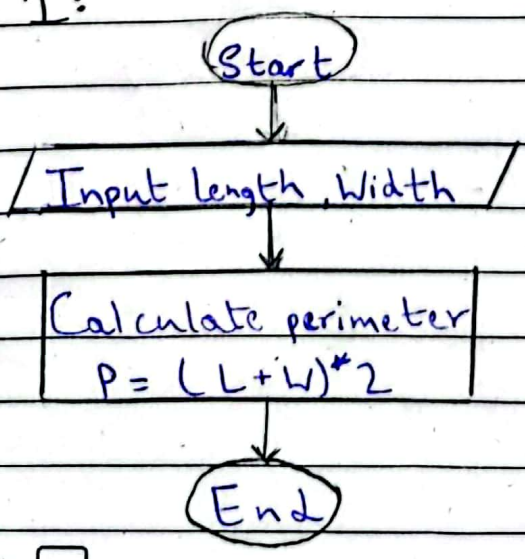
IPO CHART

TASK 1:

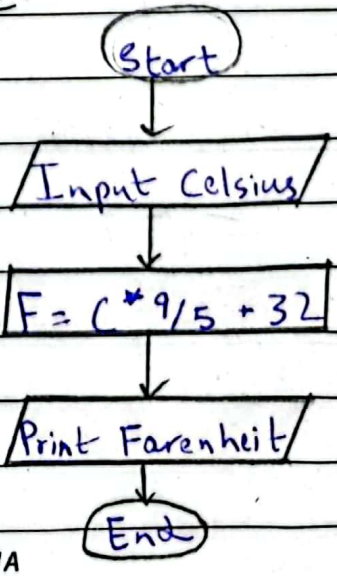
INPUT	PROCESSING	MODULE REFRENCE	OUTPUT
Input n1	·)M = n1 * n2	Calculate	Even or Odd
Input n2	·) Divide M by 2	Calculate	
	·)If M is divided by two such that remainder is a whole number, then print even otherwise print odd	Condition	
		Print	
	·)End	Stop	

FLOW CHART

TASK 1:



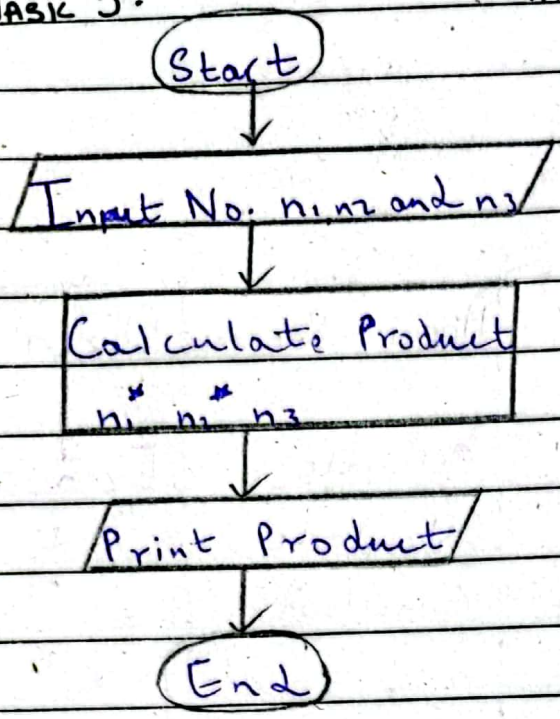
TASK 2:



SHOKIA

Date:

Task 3:



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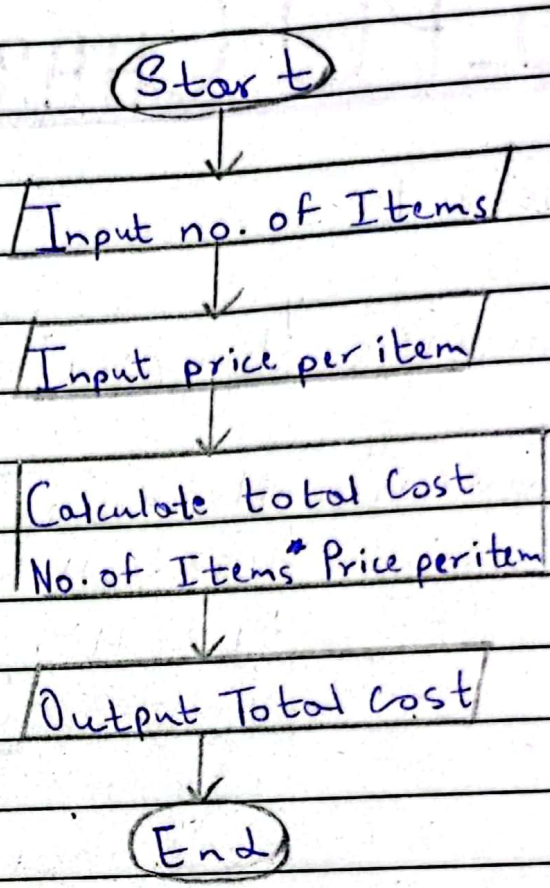

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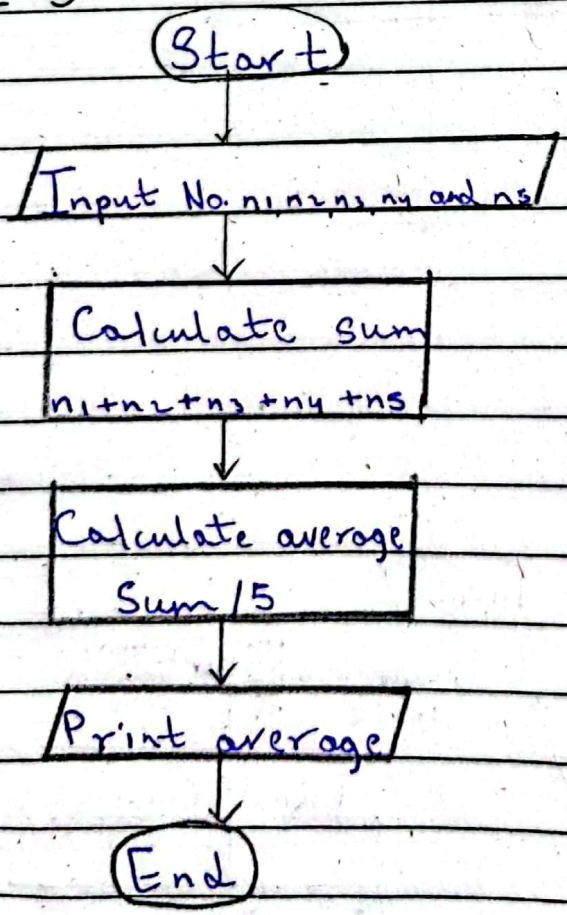

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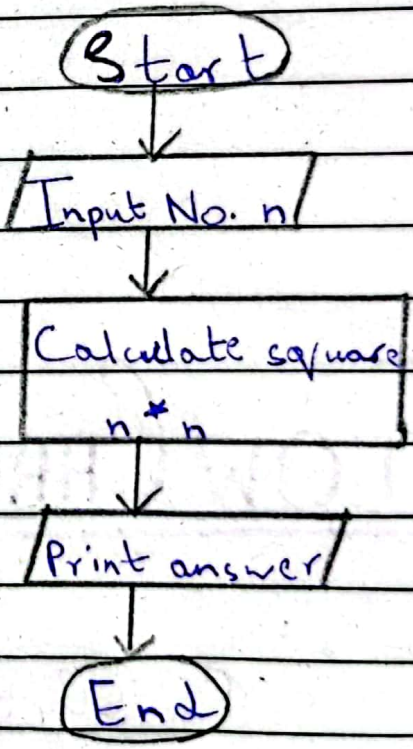
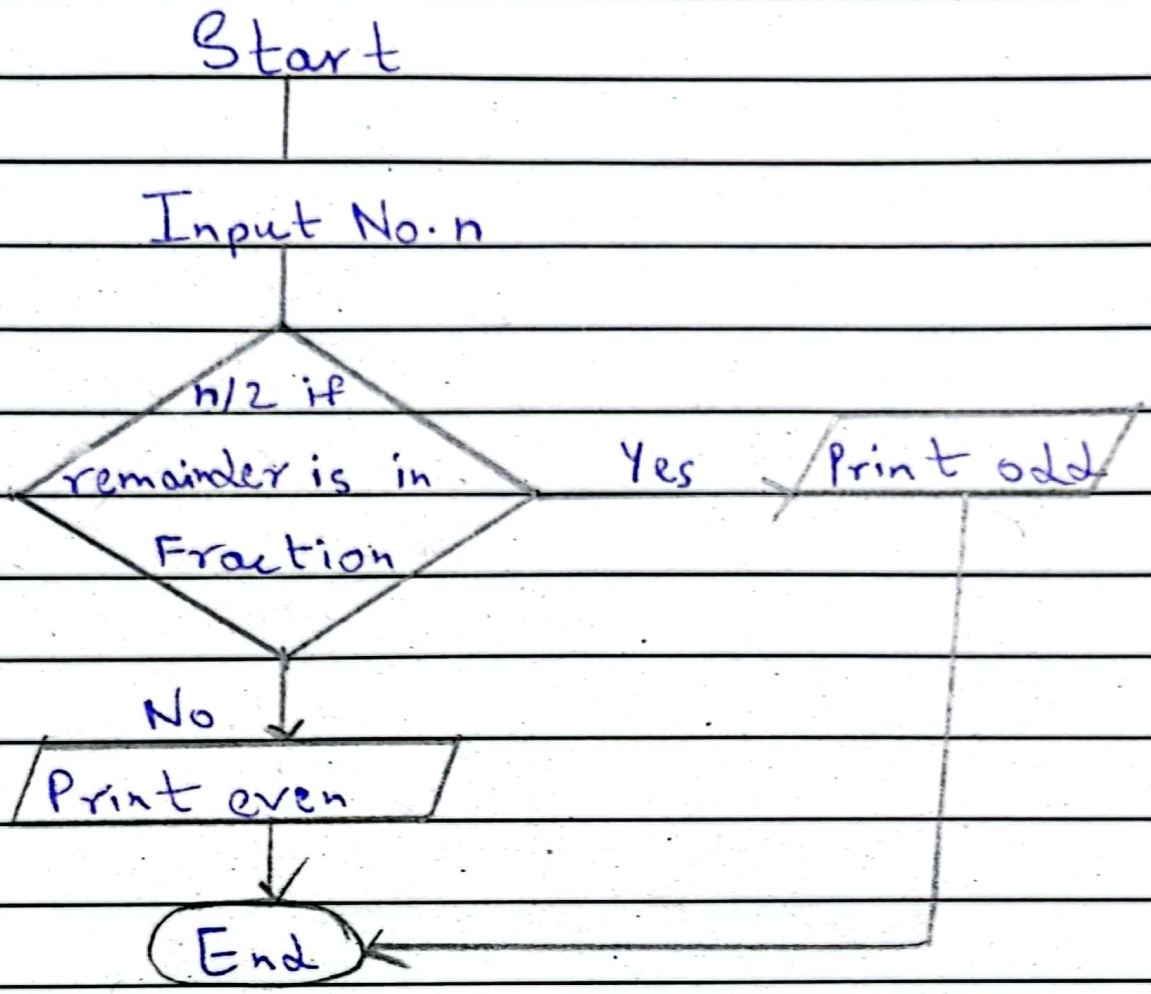


Task 7:



Task 8: