

240801166

Ex. No.: 01

Calculate Area and Perimeter

Write an Algorithm and draw a Flowchart to Calculate the area and perimeter of a square.

Algorithm:

Step 1: Start

Step 2: Get the input for side of the square.

Step 3: Initialize "Perimeter" and "Area" is equal to zero

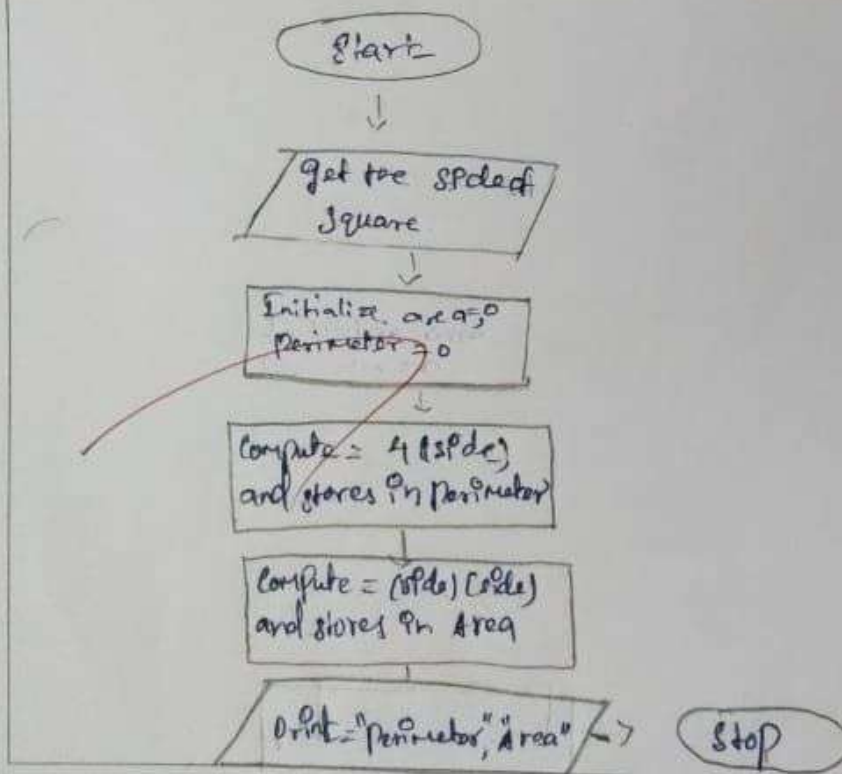
Step 4: Multiply 4 by the side and store in Perimeter.

Step 5: Multiply the side by itself and store in Area

Step 6: Print "Perimeter" and "Area"

Step 7: Stop

Flowchart:



Ex. No.: 02

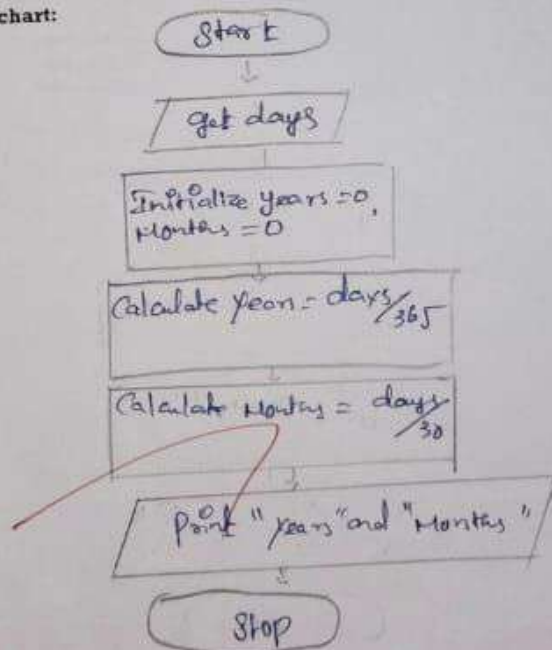
Days to Year Conversion

Write an Algorithm and draw a Flowchart to convert the given days into years & months.

Algorithm:

- Step 1: Start
 Step 2: Get the input as a days
 Step 3: Initialize years = 0 and Months = 0
 Step 4: Calculate years = $\text{days} / 365$
 Step 5: Calculate Months = $\text{days} / 30$
 Step 6: Print "years" and "Months"
 Step 7: Stop

Flowchart:



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Ex. No.: 03

Prime Number

Write an Algorithm and draw a Flowchart to check whether the given number is Prime or not.

Algorithm:

Step 1: Start

Step 2: get num

Step 3: Initialize $i = 2$, $n = \text{num} - 1$

Step 4: check $i \leq n$, $\text{num} \% i == 0$ goto step 7 else go to step 8

Step 5: increment $i = i + 1$

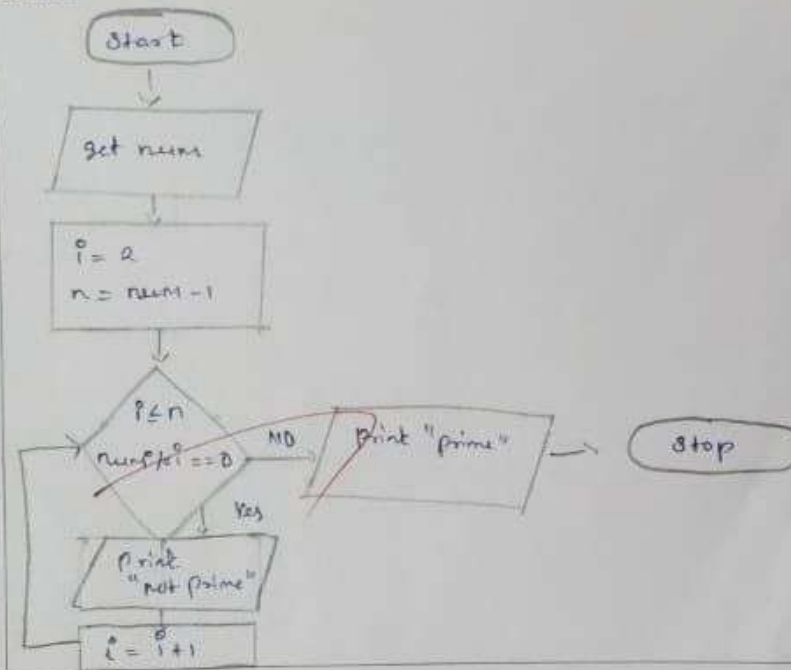
Step 6: continue until loop fails

Step 7: print "not prime".

Step 8: print "prime"

Step 9: stop

Flowchart:



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Ex. No.: 04

Leap Year

Write an Algorithm and draw a Flowchart to check whether the given year is Leap year or not.

Algorithm:

Step 1: start

Step 2: Get year

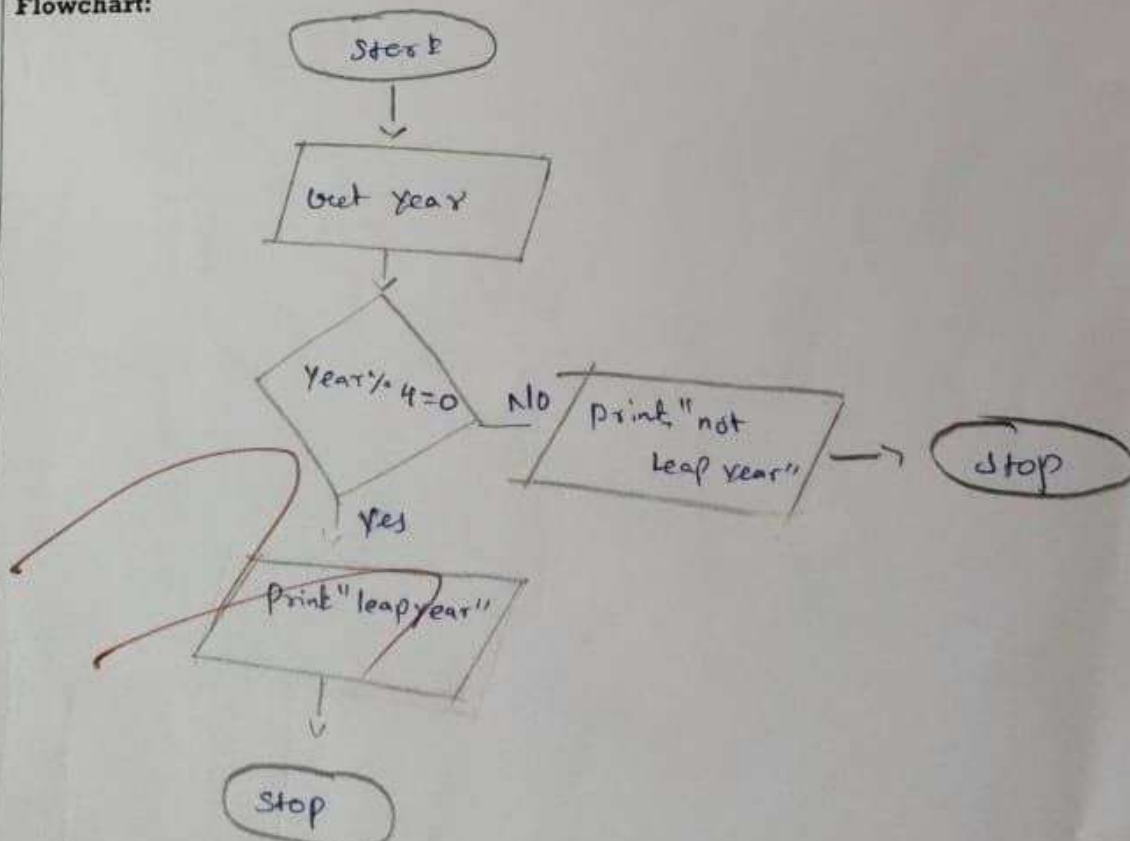
Step 3: check $\text{year} \% 4 = 0$ then go to step 4, else go to step 5.

Step 4: print "Leap Year"

Step 5: print "not leap year"

Step 6: stop

Flowchart:



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Ex. No.: 05

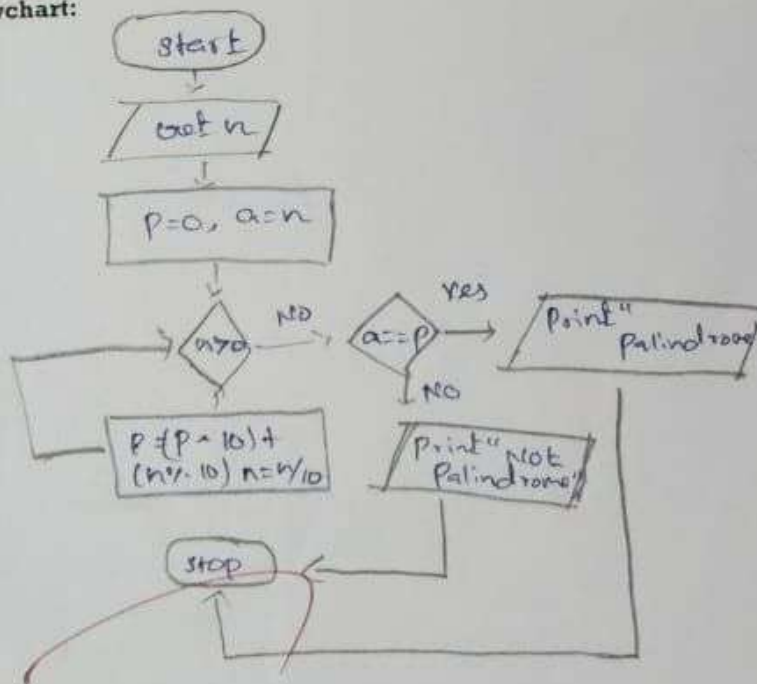
Palindrome Number

Write an Algorithm and draw a Flowchart to check whether the given number is palindrome number or not.

Algorithm:

- Step 1: Start
 Step 2: Get n from user
 Step 3: Set $p = 0$, $a = n$
 Step 4: Check whether $n > 0$, go to step 5 else go to step 7
 Step 5: $p = (p * 10) + (n \% 10)$
 Step 6: $n = n / 10$, go to step 4
 Step 7: Check whether $a == p$, true go to step 8 else go to step 9
 Step 8: Print "palindrome", go to step 10
 Step 9: Print "Not Palindrome", step 10: stop

Flowchart:



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Ex. No.: 06

Sum of Digits

Write an Algorithm and draw a Flowchart to calculate the sum of digits in the given number.

Algorithm:

Step 1: start

Step 2: Get 'n' from the user

Step 3: Initialise sum is equal to zero

Step 4: check $n > 0$ if it's true go to step 5 else go to step 8Step 5: $sum = sum + (n \% 10)$ Step 6: $n = n / 10$, go to step 4

Step 7: Print "sum"

Step 8: stop.

Flowchart:

