

Ex. No.: 1

Date: 24/10/24

Calculate Area and Perimeter

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

Algorithm:

Step 1: Start

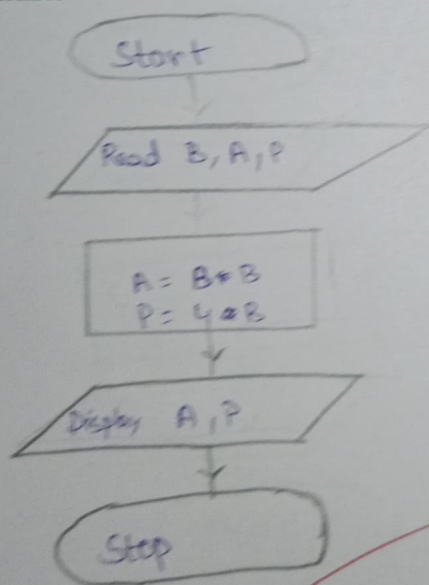
Step 2: Read the variable B as length of a side of a square, A, P as Area, Perimeter

Step 3: Multiply $B \times B$ as A for Area and $4 \times B$ as P for Perimeter

Step 4: Display A as Area and P as Perimeter

Step 5: Stop

Flowchart:



P. M.
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Ex. No.: 2

Date: 24/10/24

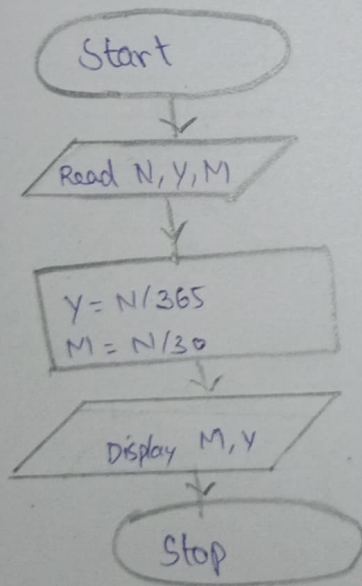
Days to Year Conversion

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

Algorithm:

- Step 1: Start
Step 2: Read N, Y, M . N as No. of days, Y as Year, M as Month
Step 3: Calculate $Y = N/365$, $M = N/30$
Step 4: Display M, Y
Step 5: Stop

Flowchart:



P.P.
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Ex. No.: 3

Date: 24/10/24

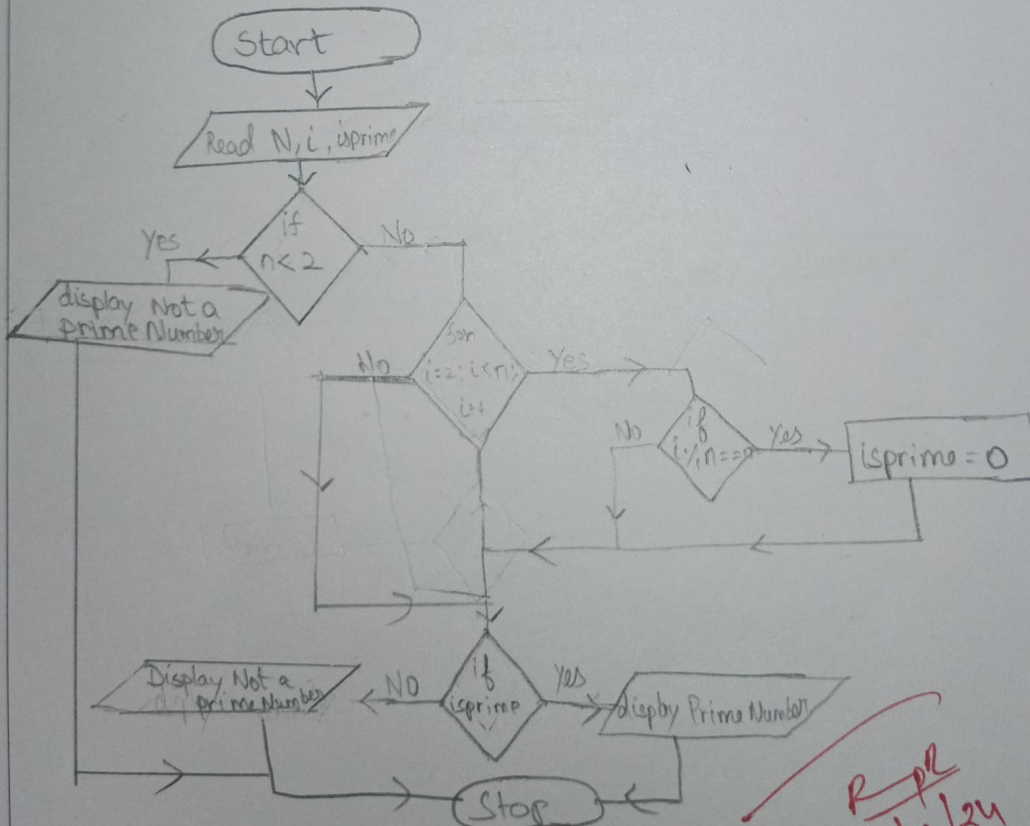
Prime Number

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

Algorithm:

- Step 1: Start
 Step 2: Read n as number, i as 2, isprime
 Step 3: Check the number n is greater than 1 if not n is not a prime number
 Step 4: Using for loop checking N is divisible by 2 to N
 Step 5: Using If loop condition as $N \% i == 0$ then isprime = 0
 Step 6: Display prime number if isprime == 1
 else display not a prime number
 Step 7: stop

Flowchart:



Rpr
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Ex. No.: 4

Date: 24/10/24

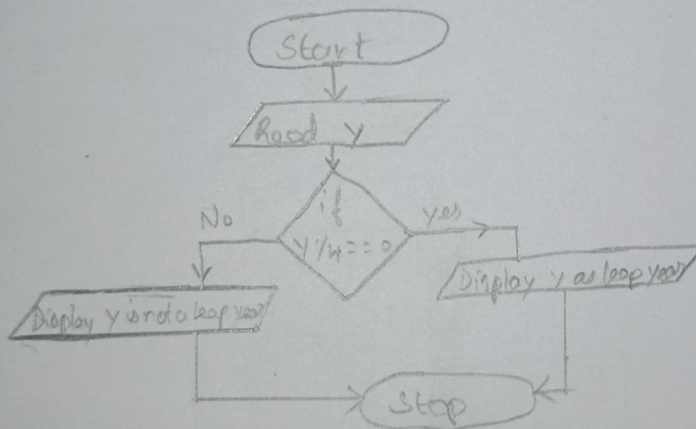
Leap Year

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

Algorithm:

- Step 1: Start
- Step 2: Read Y as Year
- Step 3: Calculate using If loop condition $Y \% 4 == 0$ then display leap year. Else display not a leap year
- Step 4: Stop

Flowchart:



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Ex. No.: 5

Date: 24/10/24

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: Read Num as the number, RN as reverse number, A

Step 3: Check Using while loop Condition $\text{Num} \neq 0$

Step 4: Calculating the num in reverse in while with statement

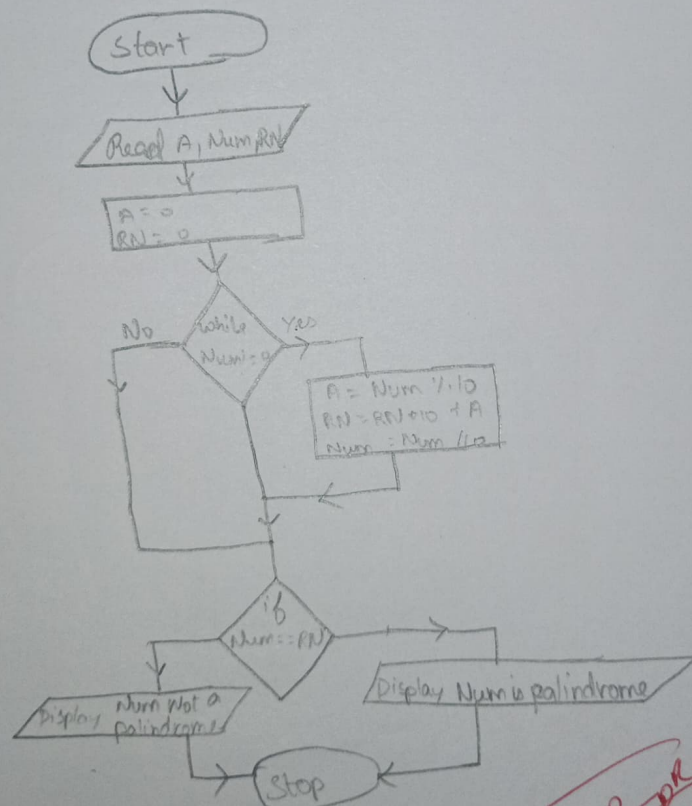
$A = \text{Num} \% 10$ to get the last digit. $\text{RN} = \text{RN} * 10 + A$.

Remove Num last digit by $\text{Num} = \text{Num} / 10$

Step 5: using If loop and Condition as $\text{Num} == \text{RN}$. display the number is not a palindrome

Step 6: Stop

Flowchart:



R pr
22/11/24

Ex. No.: 6

Date: 24/10/24

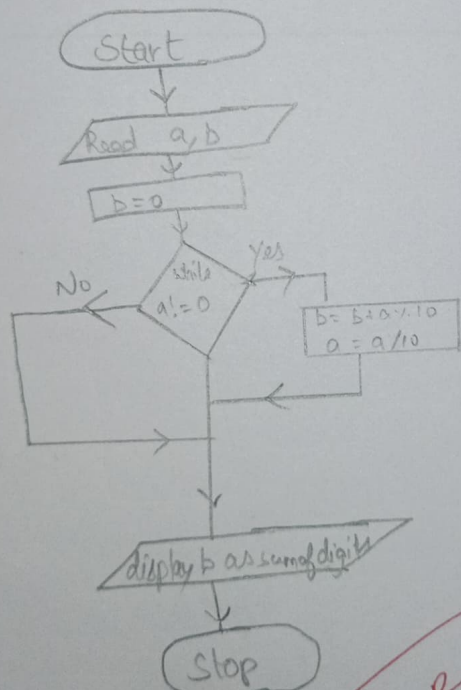
Sum of Digits

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

Algorithm:

- Step 1: Start
 Step 2: Read a as user input, b as 0
 Step 3: Check using while loop and condition $a \neq 0$
 Step 4: Statements in while loop are $b = b + a \% 10$ and decreasing a
 digit $a = a / 10$
 Step 5: Display b as the sum of the digit
 Step 6: Stop

Flowchart:



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