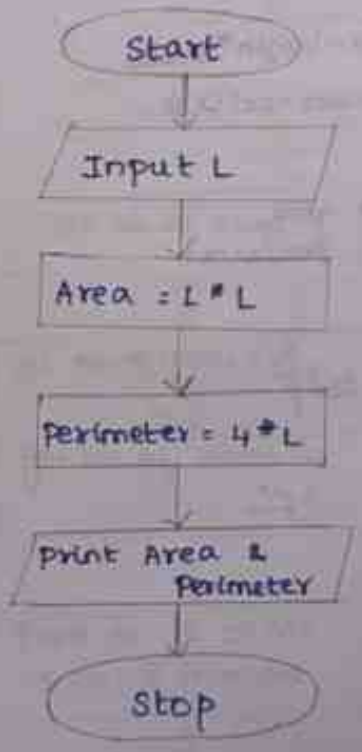
EXP NO: 1 DATE: 4/10/24

Write an Algorithm and Draw a Flowchart to calculate the area and perimeter of a square.

Algorithm:

Step 1 - Start
Step 2 - Input Length (L)
Step 3 - Area A = L * L
Step 4 - calculate perimeter P = 4 * L
Step 5 - print Area and perimeter
Step 6 - Stop

Flowchart:



output:

Area of Square is : 24
perimeter Area of the square is : 48

D.K.
04/10/24

EXP NO: 4 DATE: 4/10/24

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

Algorithm:

Step 1 - Start

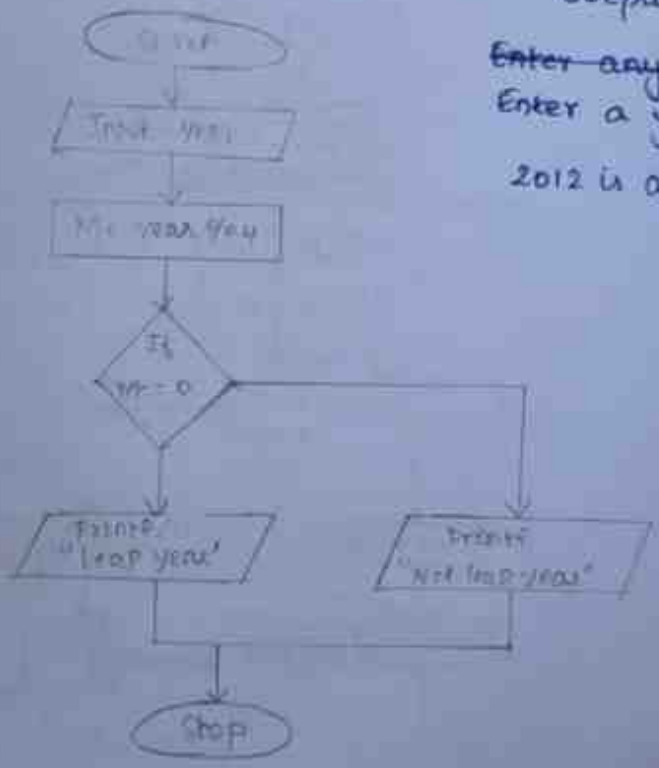
Step 2 - Input year (M)

Step 3 - check if year %4 == 0 then print It is leap year. Go to step 4

Step 4 - Display it is not leap year.

Step 5 - Stop

Flowchart



Output:

~~Enter any number~~

Enter a year : 2012

2012 is a leap year

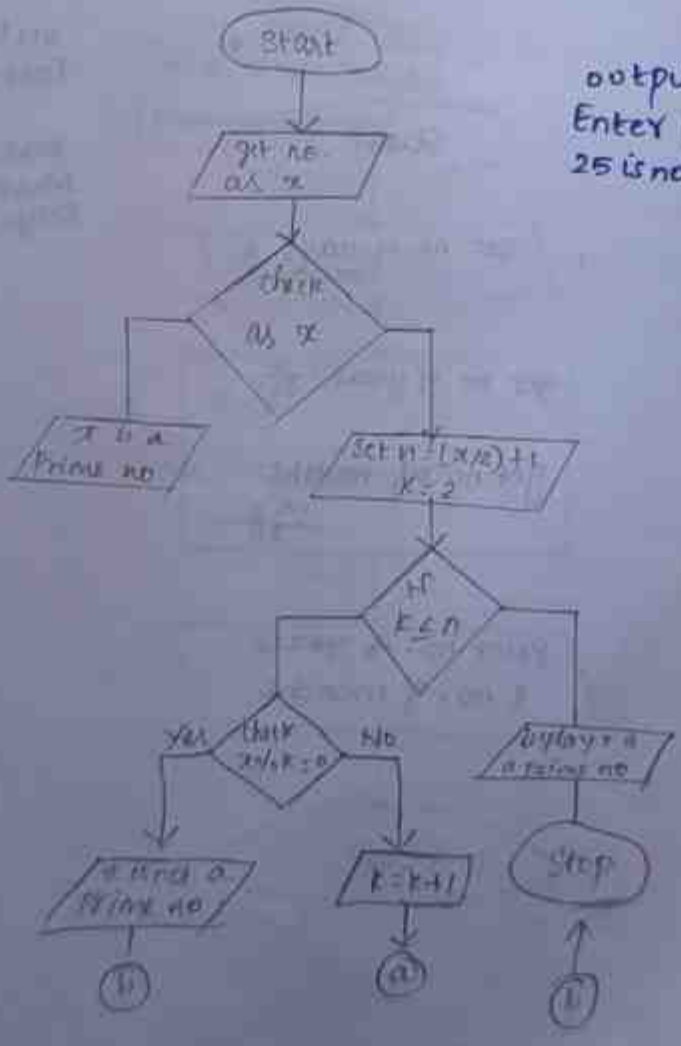
R.P.
04/10/24

EXP NO: 3 DATE: 4/10/24

Write an Algorithm and draw a Flowchart to check the given number is prime or Not.

Algorithm:

Step 1 - Start
Step 2 - get a Input Number (N) From the user as x
Step 3 - Initialize i= 2. check whether x<=1. otherwise go to
Step 4 - While i<=num/2 display n is not a prime number
Step 5 - Set n = (x/2) + 1, k = 2
Step 6 - if k<=n otherwise go to step 10
Step 7 - check x%k=0, otherwise go to step 9
Step 8 - Display n is not a prime number, go to
Step 9 - k=k+1, go to step 6
Step 10 - display x is prime number
Step 11 - Stop



output:
Enter the number: 25
25 is not a prime Number

PDF optimized

EX P NO : 2

DATE: 4/10/24

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

Algorithm:

Step 1- Start

Step 2 - Get the number of days from the user as x.

Step 3 - To calculate the number of years;

$$\text{years} = \frac{x}{365}$$

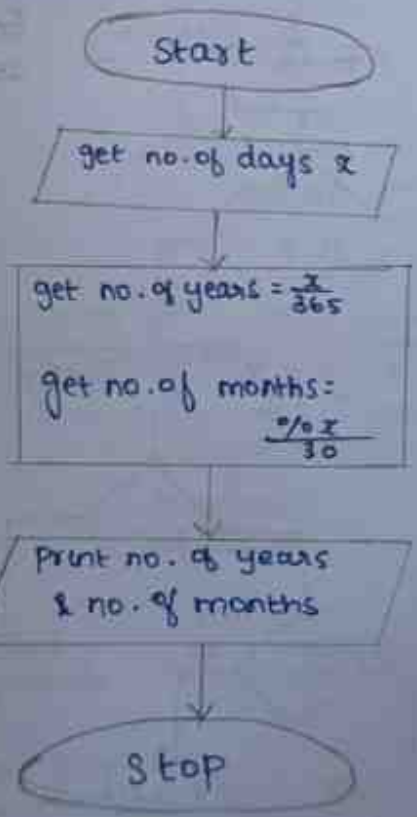
Step 4 - To calculate %o x to get remaining days

Step 5 - To calculate the remaining days together numbers of months $\frac{\%o\ x}{30}$

Step 6 - Print number of years & number of months.

Step 7 - Stop

Flowchart:



output:

Enter the number of days: 456

Year: 1
Months: 3
Days: 1

Perf. 04/10/24

DATE: 4/10/24

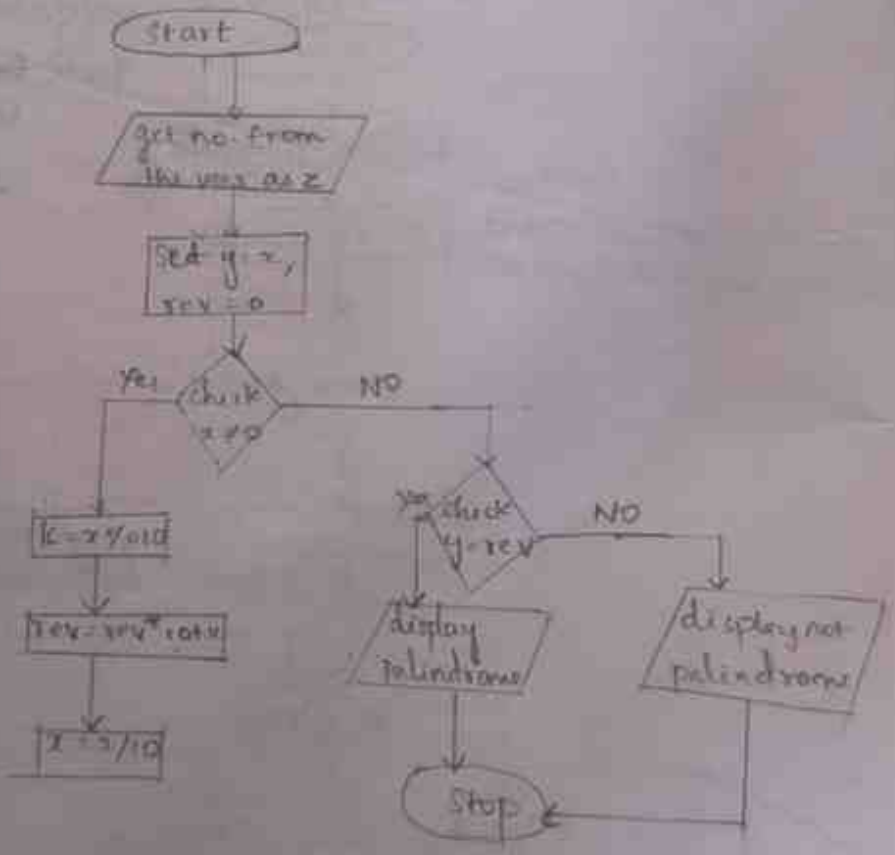
EXP NO: 5

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

Algorithm:

Step 1 - Start
Step 2 - Get a number from the user as z
Step 3 - Set x = z ; rev = 0
Step 4 - check whether x is not equal to 0, otherwise go to Step 8.
Step 5 - compute k = z % 10
Step 6 - rev = rev * 10 + k
Step 7 - z = z/10, go to 4
Step 8 - check whether y == rev, otherwise go to step 10
Step 9 - display given number is palindrome, go to step 11
Step 10 - display given number is not palindrome
Step 11 - Stop

Flowchart:



Sample output:

x = 1221
x is palindrome

Rok
10/10/24

EXP NO: 6

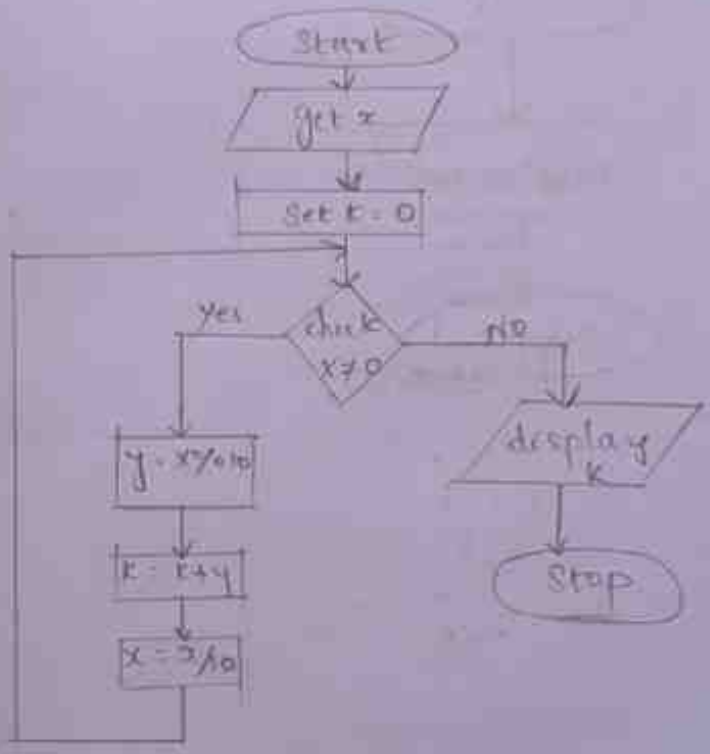
DATE: 4/10/24

Write an algorithm and draw a flow chart to calculated the sum of digits in the given number.

Algorithm:

Step1 - Start
Step2 - Get the number from the user as x
Step3 - Set k=0
Step4 - check whether x is not equal to 0, go to step8
Step5 - Compute y= x%10
Step6 - k=k+y
Step7 - compute x = x/10, go to step 4
Step8 - display k
Step9 - Stop

Flowchart:



Sample output

x = 1234

Sum = 10

RM
10/10/24