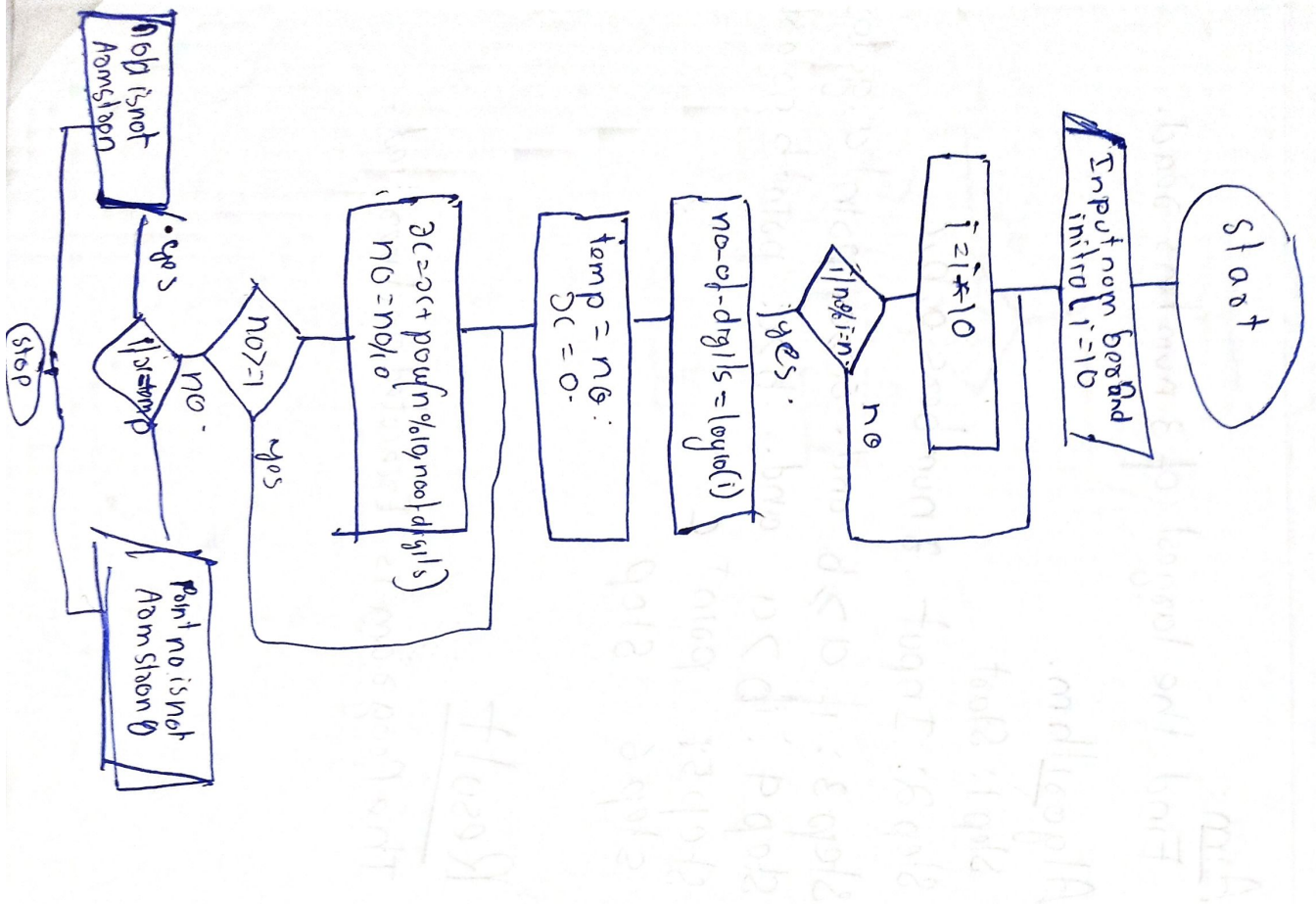


Flow Chart



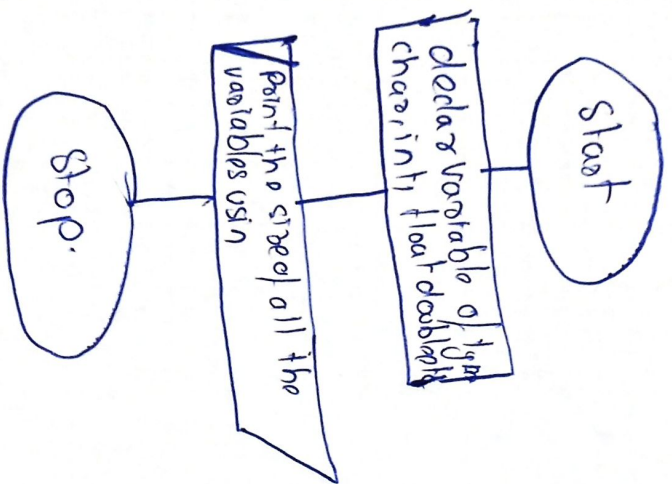
Armstrong Number .

Aim
To check whether then digit number is Armstrong or not .

Algorithm.

- Step 1: Start
- Step 2: Input the number and declare $i=10$.
- Step 3: check if. number % i = number.
- Step 4: Repeat step 3 and each time assign $i=i*$ until $\text{number} \% i$ = number.
- Step 5: set no-of-digits to $\log_{10}(i)$
- Step 6: Assign temp to be equal to the number.
- Step 7: $dc = dc + \text{pow}(n \% 10, \text{no-of-digits})$
and $n = n / 10$.
- Step 8: Repeat step 7 while number $>= 1$.
- Step 9: Check if. $dc == \text{temp}$ then print.
- Step 10: Stop.

Flow Chart



Display size of variables using sizeof.

Aim

Write a program to display the size of all variables using.

Algorithm

Step 1: Start

Step 2: Declare all the variables of different datatypes

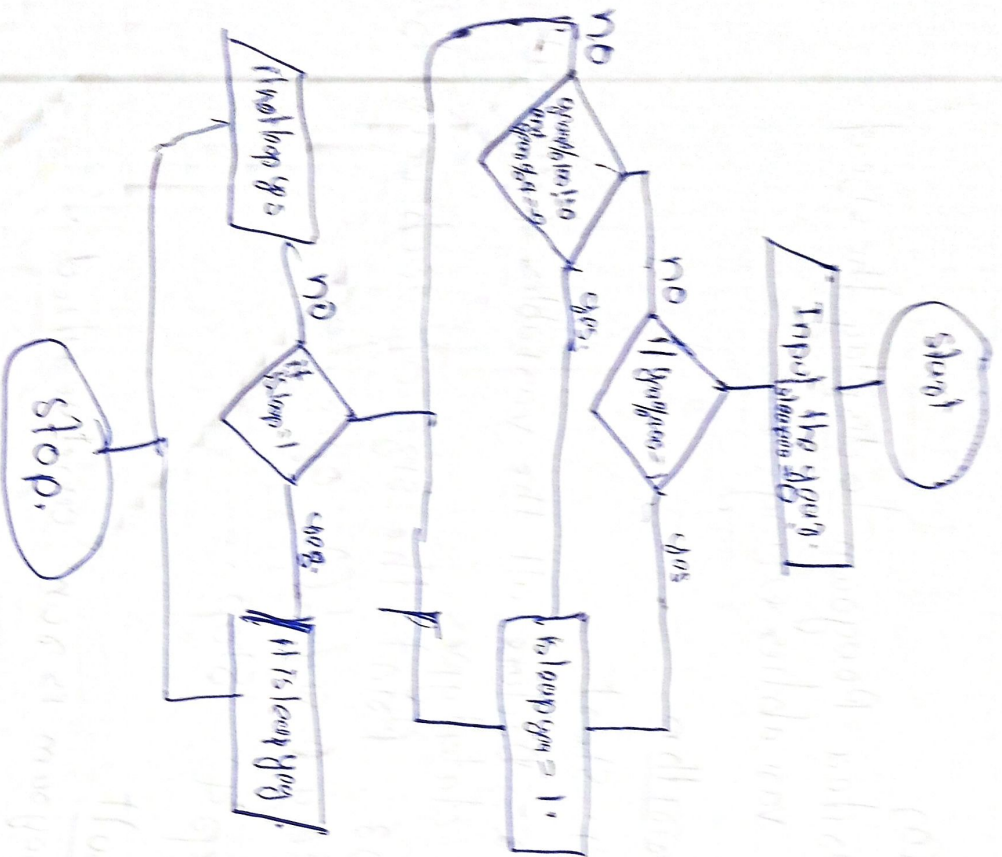
Step 3: Print the size of each variable using sizeof() operator.

Step 4: Stop.

Result

Program is run and verified.

Flow Chart



Leap year check.

Ans

To check whether a year is leap year or not.

Algorithm

Step 1: Start

Step 2: Input number, and declare is-leap year.

Step 3: If year is divisible by 400 is-leap year.

Step 4: If year not divisible by 400 and divisible by

~~400~~ then is-leap-year = 1.

Step 5: is-leap if is-leap-year = 1.

then year is leap year.

Step 6: If it is-leap year not 1 print

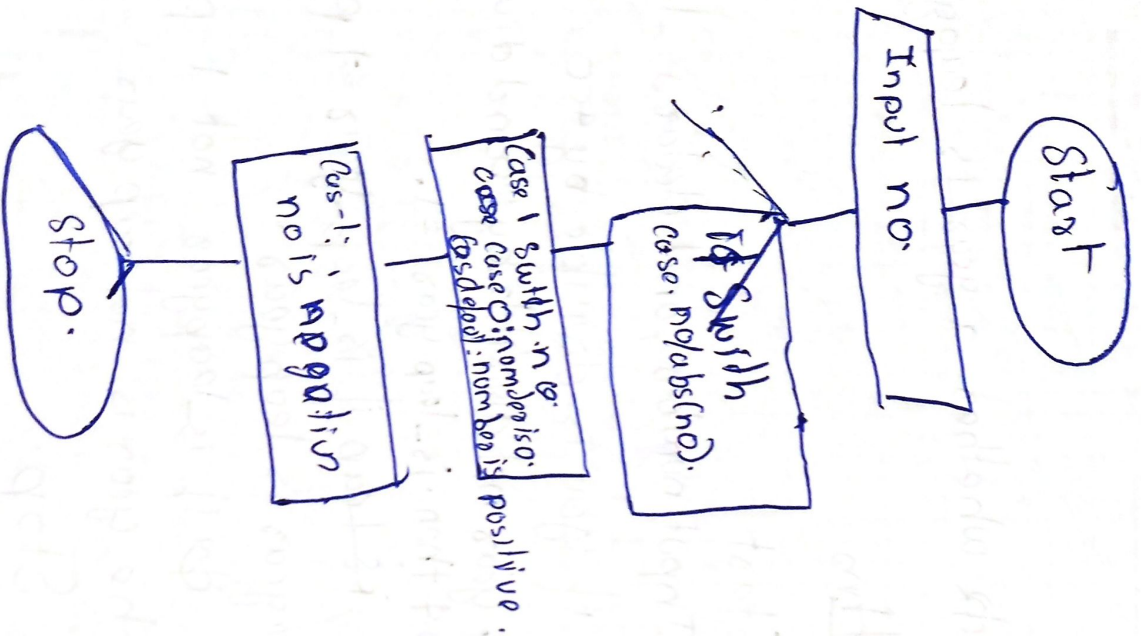
the year is not leap year.

Step 7: Stop.

Result

Program is run on verified

Flow Chart



Determine the number is positive or negative

Aim

Write a program to check whether a number is positive or negative or zero. Using switch case.

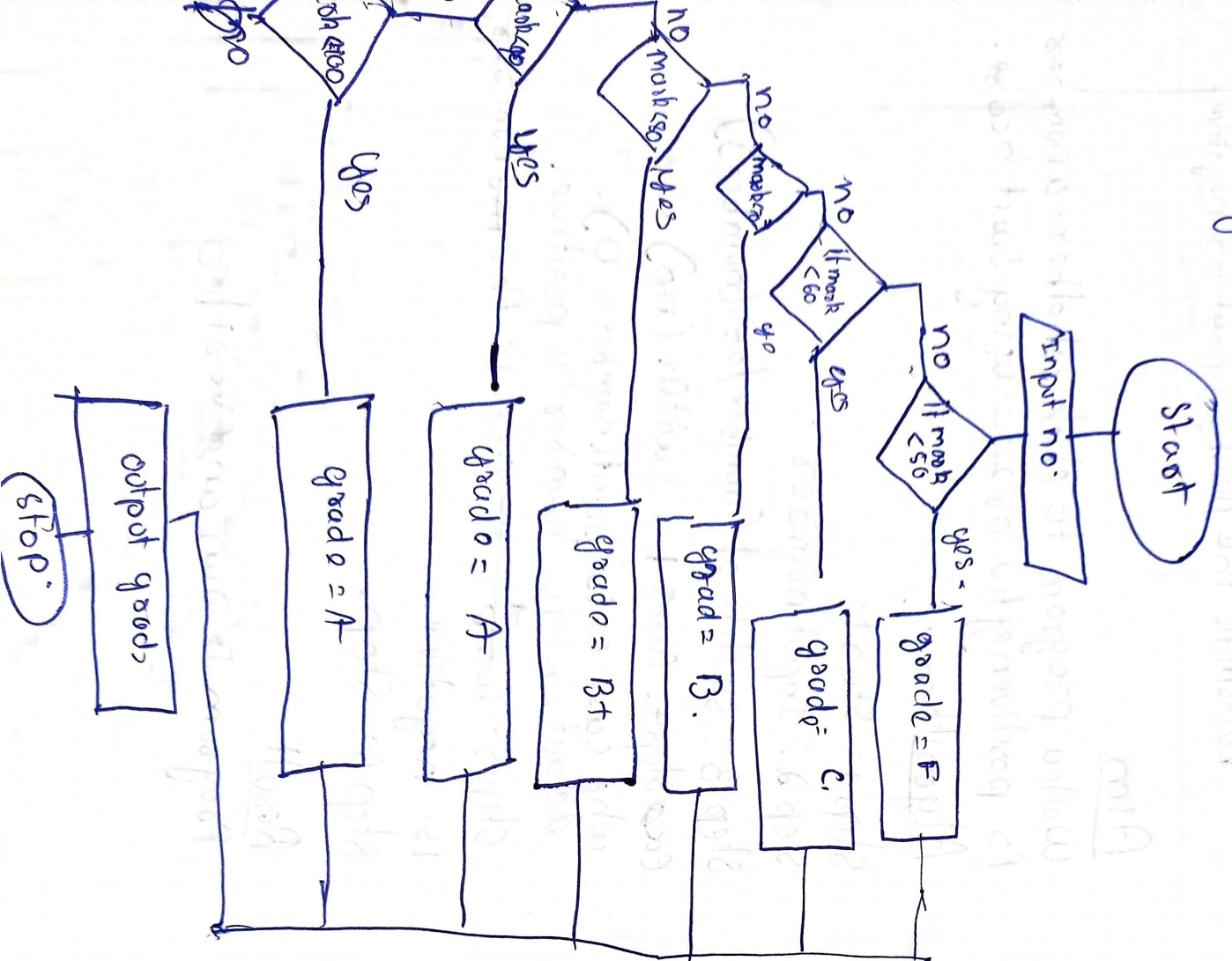
Algorithm

- Step 1: Start.
- Step 2: Input number.
- Step 3: Switch of (number/abs(number)).
- Step 4: Case 1: switch (no).
when case 0 is print (number is 0).
default case is. number is positive.
- Step 5: Case 2: the case is the number
is negative.
- Step 6: Stop.

Result

Program is run and verified

Algorithm.



Computer the grades of student

Aim

Write a computer program to compute the grade of student using else if ladder.

marks

$mark < 50$

$50 \leq mark < 60$

$60 \leq mark < 70$

$70 \leq mark < 80$

$80 \leq mark < 90$

$90 \leq mark < 100$

Algorithm

Step 1: Start

Step 2: Input the ~~marks~~ mark

Step 3: if mark < 50 grade is F else if mark < 70 grade

if mark < 80 grade is B+ if mark ≤ 90

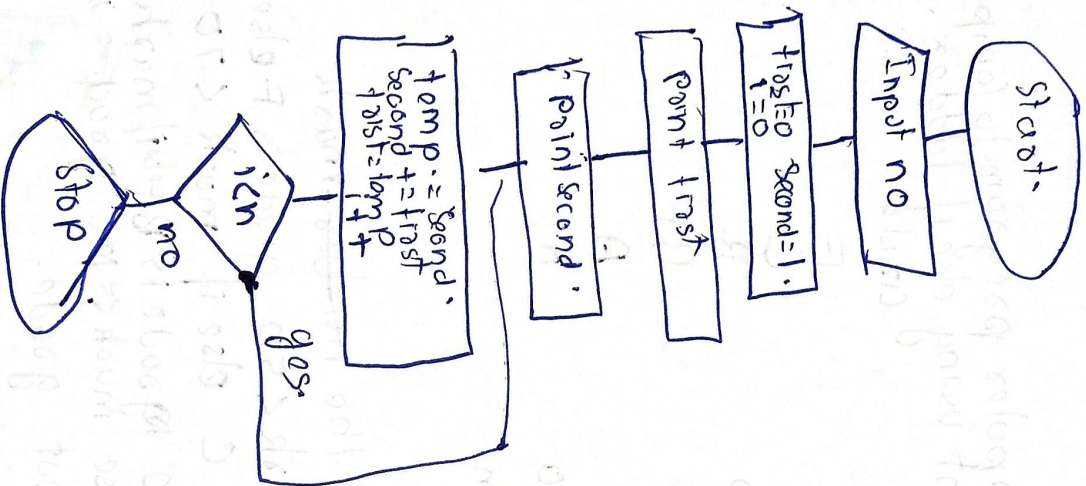
grade is A else mark ≤ 100 grade = A

Step 4: output grade.

Steps: Stop.

Result: Program is run and verified

Flow Chart



Fibonacci Series

Aim:

Generate Fibonacci Series. upto given no

Algorithm

Step 1: Start

Step 2: Initialize and declare first = 0 and second = 1

Step 3: Print first.

Step 4: Print second.

Step 5: temp = second.

second = second + first
first = temp.

Step 6: Repeat (4) and (5)

until $i < n$.

Step 7: Stop.

Result
program is run and verified