Q1: Find student average mark in mark1 and mark2.

Algorithm:

STEP 1: start

STEP 2: declare variables mark1,mark2,sum and avg

STEP 3: read values mark1 and mark2

STEP 4: add mark1 and mark2 and assign the result to sum

STEP 5: sum<--mark1+mark2

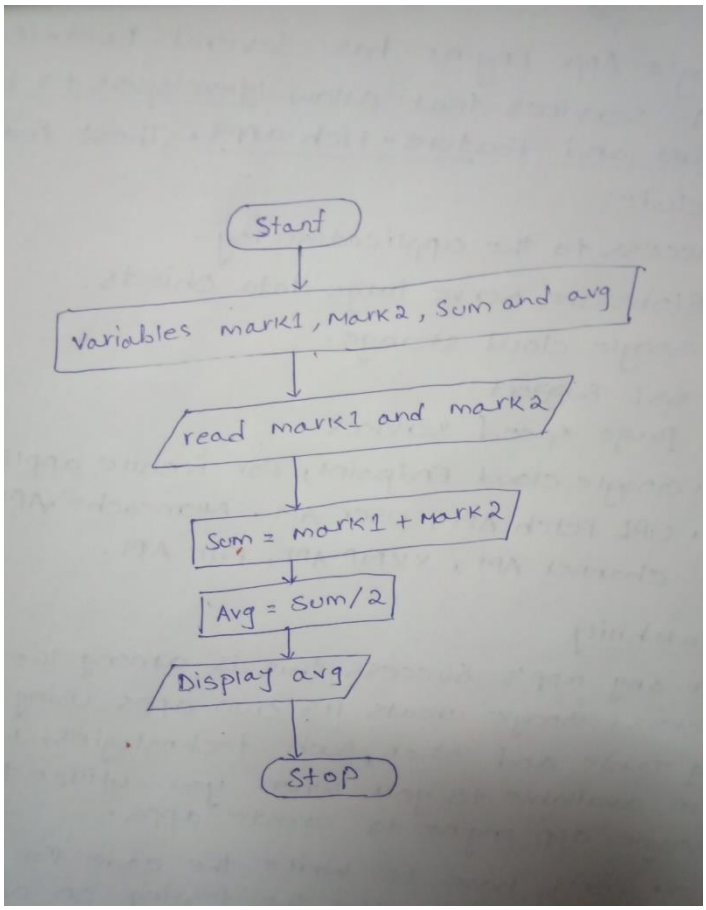
STEP 6: divided sum by 2 and assign the result to avg

STEP 7: avg<--sum/2

STEP 8: display avg

STEP 9: stop

Flowchart:



Q2: Calculate the total fine charged by library for late return books. the charge is 0.20 INR per day.

Algorithm:

STEP 1: start

STEP 2: declare variable actualReturnDate, lateReturnDate,result,fine

STEP 3: read values actualReturnDate and lateReturnDate

STEP 4: subtract actualReturnDate from lateReturnDate and assign the result to the result

STEP 5: result<--lateReturnDate - actualReturnDate

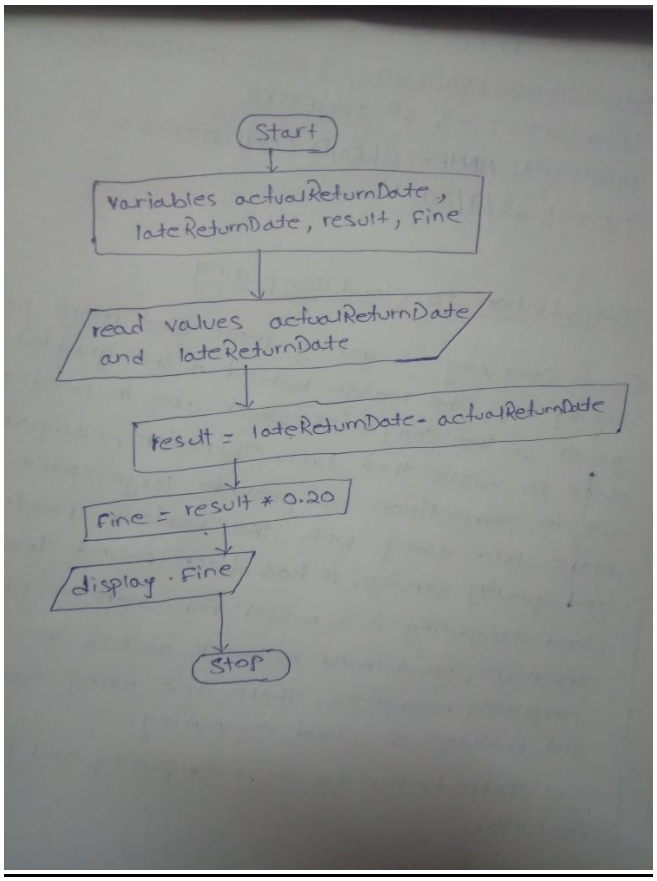
STEP 6: multiply result to 0.20 and assign the result to the fine

STEP 7: fine<--result*0.20

STEP 8: display fine

STEP 9: stop

Flowchart:



Q3: You had brought a new shirt which cost RS 29.90 with 15% discount. count the net price for the shirt.

Algorithm:

STEP 1: start

STEP 2: declare variables sprice,discount,discountPrice,netprice

STEP 3: initialise value 29.90 to sprice variable and 0.15 to discount variable

STEP 4: multiply sprice to .15 and assign the result to discount

STEP 5: discountPrice <-- discount * sprice

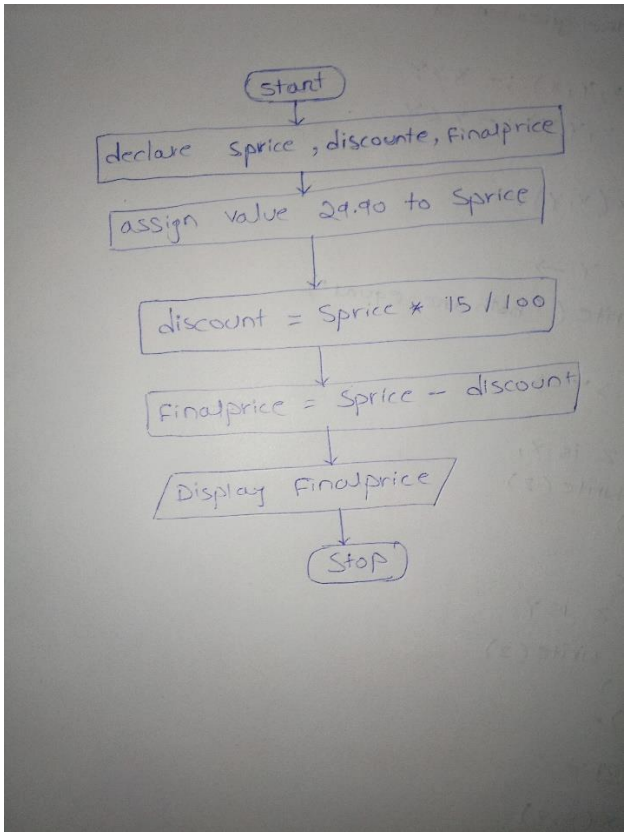
STEP 6: subtract discount from sprice and assign the result to netprice

STEP 7: netprice <-- sprice - discountPrice

STEP 8: display netprice

STEP 9: stop

Flowchart:



Q4: Find the smallest number among three different numbers.

Algorithm:

STEP 1: start

STEP 2: declare variable num1,num2 and num3

STEP 3: read values num1,num2 and num3

STEP 4: compare num1 with num2 and num3
num1 < num2
num1 < num3
if num1 is smaller than num2 and num3 than num1 is the smallest among three numbers

STEP 5: display num1

STEP 6: again compare num2 with num1 and num3
num2 < num1
num2 < num3
if num2 is smaller than num1 and num3 than num2 is the smallest among three numbers

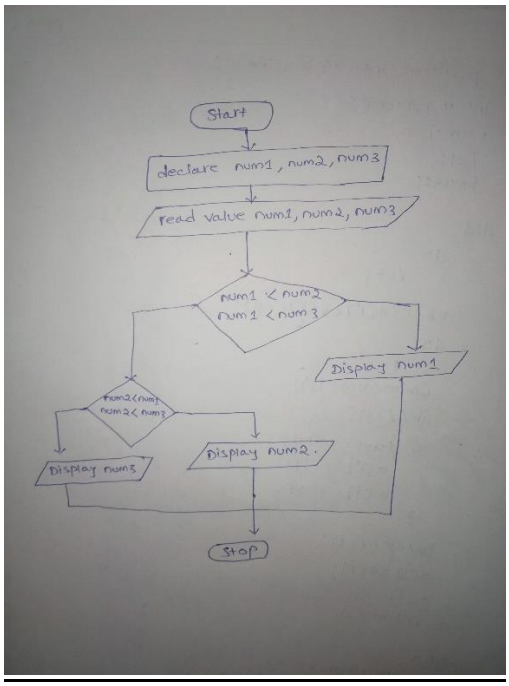
STEP 7: display num2

STEP 8: else num3 smallest among three numbers

display num3

STEP 9: stop

Flowchart:



Q6: Find the factorial of a given number.

Algorithm:

STEP 1: start

STEP 2: declare variables num and fact

STEP 3: initialise value 1 to the fact variable

STEP 4: read num value

STEP 5: repeat step 6 and step 7 until num equal to 1

STEP 6: fact= num * fact

STEP 7: num--

STEP 8: display fact

STEP 9: stop

Flowchart: