

Q1. Find student average mark given mark1 and mark2.

ALGORITHM:

step 1-start

step2-Declare values mark1 ,mark 2 and average

step3-Read values mark1 and mark2

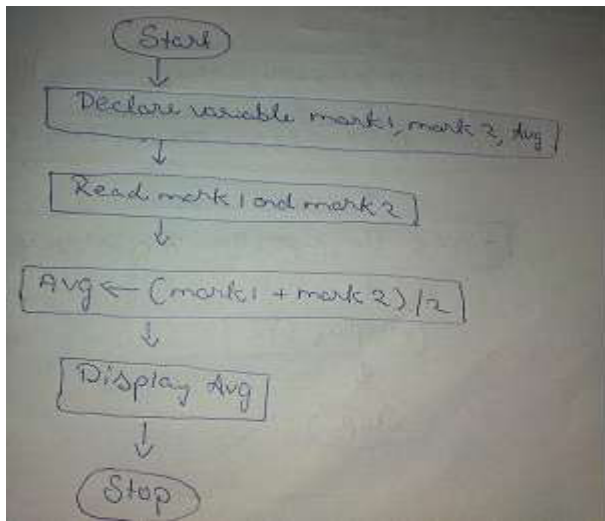
step4- add mark1 and mark2 and divide by 2 and assign the result to average

$avg \leftarrow mark1 + mark2 / 2$

step5 -display average

step6-stop

FLOW CHART:



Q2.Calculate the total fine charged by library for late return books . the charge is 0.20 Inr for 1 day.

ALGORITHM:

step1-start

step2-declare days initialize charge and fine

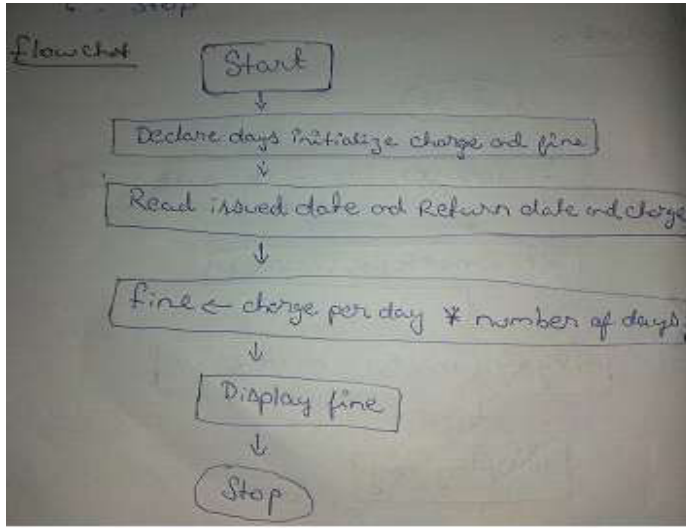
step3- read issued date and return date and change

step4- multiply the charge per day * numbers of days

step5- display fine

step6- stop

FLOW CHART:



Q3.You had bought a nice shirt which cost is rs-29.90 with 15% discount. count the net price for the shirt.

ALGORITHM:

step1- start

step2-declare cost ,discount and net price

step3- read cost and discount

step4- multiply the discount and cost and find the discount cost

$$\text{discount cost} \leftarrow 0.15 * \text{cost}$$

step5-read discount cost

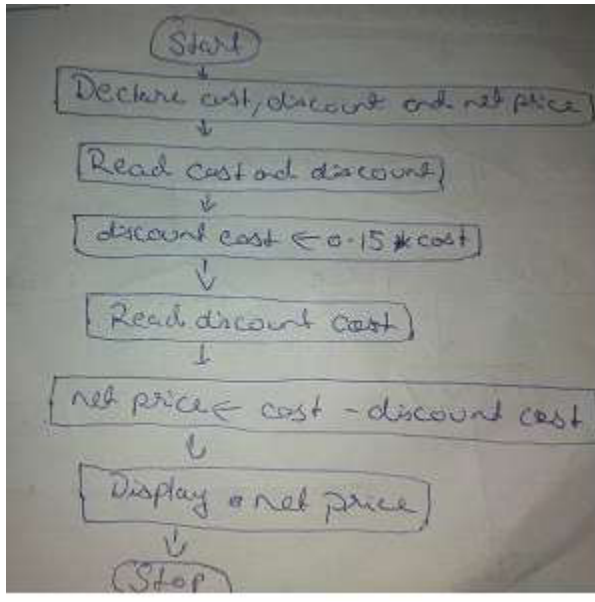
step6- subtract the actual cost and discount cost and assign the result in netprice

net price \leftarrow cost - discount cost

step7- display net price

step8-stop

FLOW CHART:



Q4.Find the smallest number among three different numbers.

ALGORITHM:

step1- start

start2- declare three variables a,b,c

start3- read variables a,b and c

step4-if a<b

if a<c

display a is the smallest number

else

display c is the smallest number

else

if $b < c$

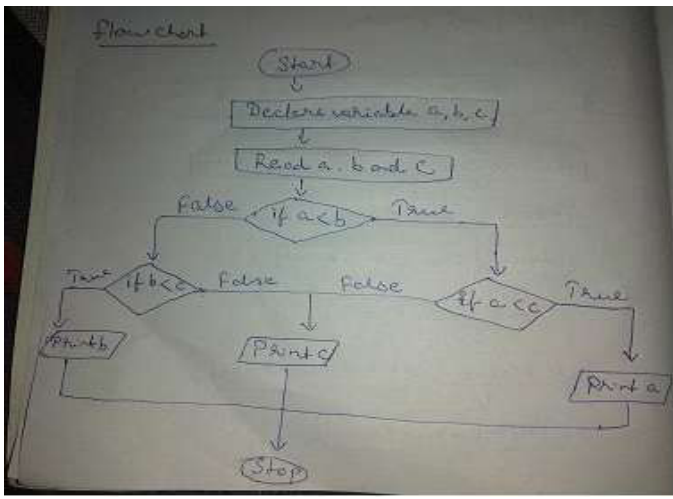
display b is the smallest number

else

display c is the smallest number

step5-stop

FLOW CHART:



Q5. Find the roots of a quadratic equation $ax^2 + bx + c = 0$.

ALGORITHM:

step1- start

step2- declare variables a,b,c

step3- read variables a,b,c

step4- find the value of D using the formula

$$d \leftarrow \sqrt{b^2 - 4ac}$$

step5- if D is greater than or equals to zero find 2 roots

$$x1 \leftarrow (-b + \sqrt{d}) / (2*a)$$

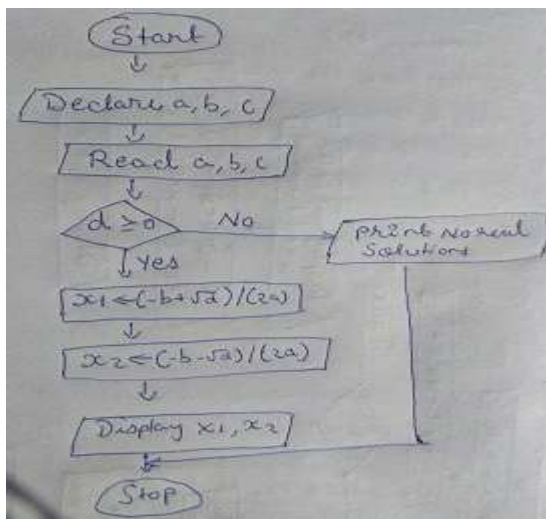
$$x2 \leftarrow (-b - \sqrt{d}) / (2*a)$$

step6- display x1,x2

step7-if D is less than zero, then print no real solutions

step8-stop

FLOW CHART:



Q6. Find the factorial of a given number.

ALGORITHM:

step1- start

step2- declare the value of n, fact=1,i=1

step3- read value of n

step4- until (i<=n)

step5- fact=fact*i

step6- i=i+1

step7- display fact

step8- stop

FLOW CHART:

