

## **Algorithm**

Q.1. Find a student average mark given mark1 and mark2.

Ans-

Step1: Start

Step2: Declare variables mark1 and mark2 and average mark

Step3: Read values mark1 and mark2

Step4: Add mark1 and mark2 and divide by 2 and assign the result to average.

Average=  $\text{mark1} + \text{mark2} / 2$

Step5: Display average mark

Step6: Stop.

2. Calculate the total fine charged by library for late return books. The charge is 0.20 INR for 1 day.

Ans-

Step1: Start

Step2: Declare variables 1<sup>st</sup> date, last date, charges for 1 day, no. of days, total charge.

Step3: Read values 1<sup>st</sup> date, last date and charge for 1 day.

Step4: No. of days= last date \_ first date

Total charges= no. of days \* charge for 1 day

Step5: Display total fine charged.

Step6: Stop

3. You had bought a nice shirt which cost Rs 29.90 with 15% discount. Count the net price for the shirt.

Ans-

Step1: Start

Step2: Declare variables cost of shirt, discount cost

Step3: Read values discounted, net price

Step4: discounted cost=  $15\% * 29.90 = 4.485$

Net price= Cost \_ discounted cost

=  $29.90 - 4.485$

= 25.41

Step5: Net price

Step6: Stop.

4. Find the smallest number among three different numbers.

Step1: Start

Step2: Declare variables a, b, c

Step3: Read variables a, b, 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.

Step6: Stop.

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

Ans-

Step1: Start

Step2: Declare variables a, b, c

Step3: Read a, b, c

Step4:  $d = \text{square root of } b^2 - 4ac$

Step5:  $x_1 = (-b + d)/2a$

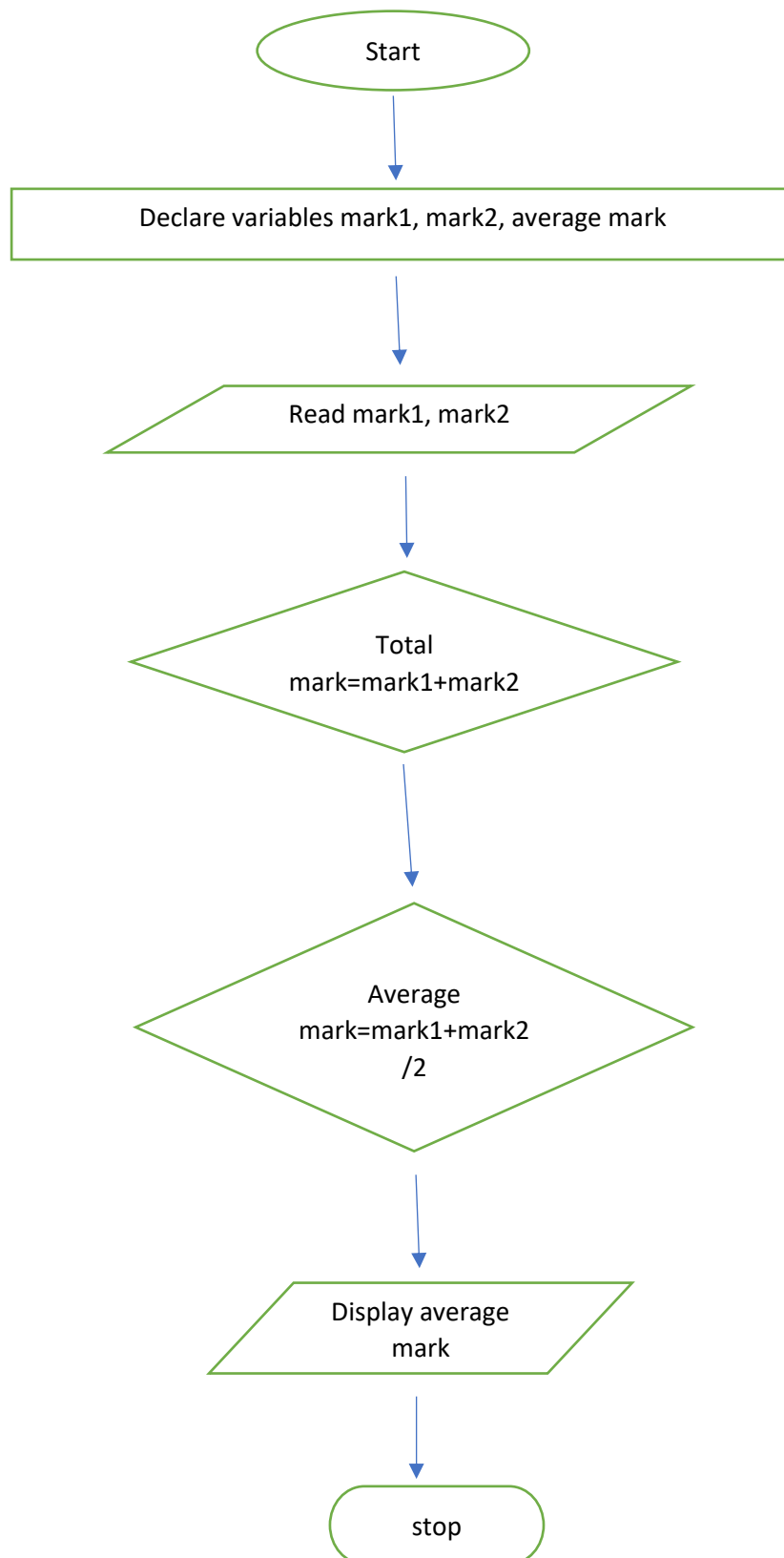
$x_2 = (-b - d)/2a$

Step6: Display  $x_1, x_2$

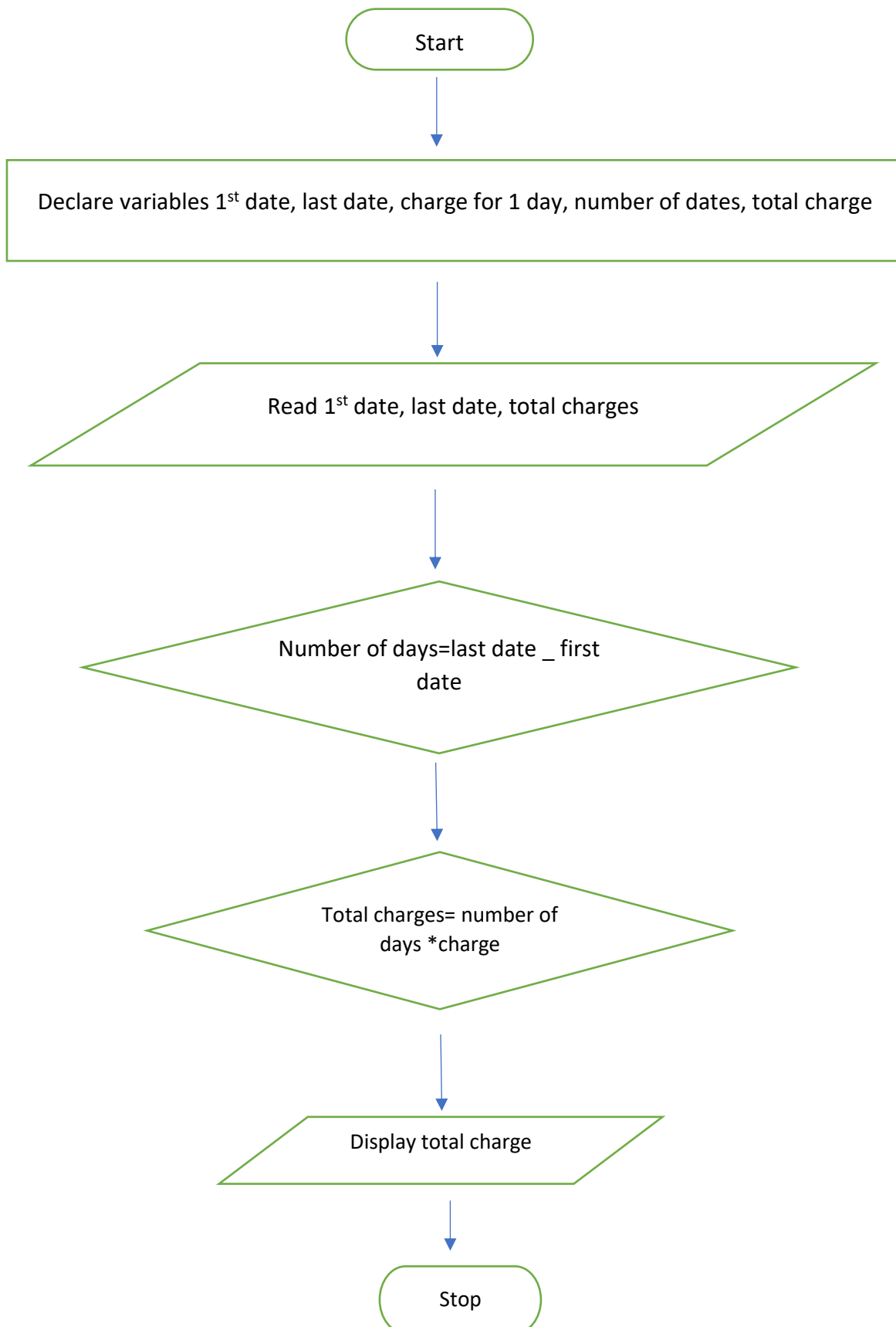
Step7: Stop.

## FLOW CHART

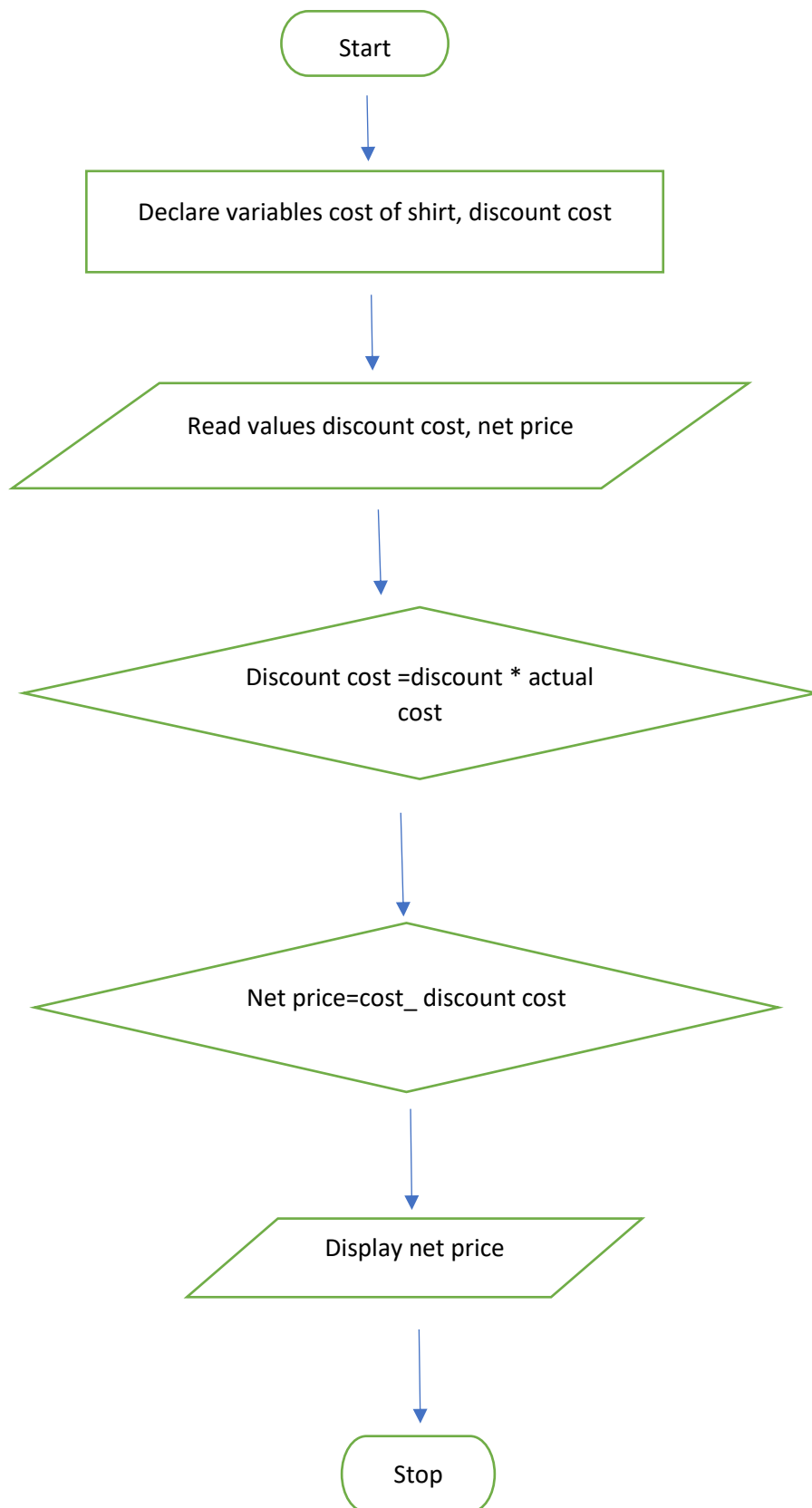
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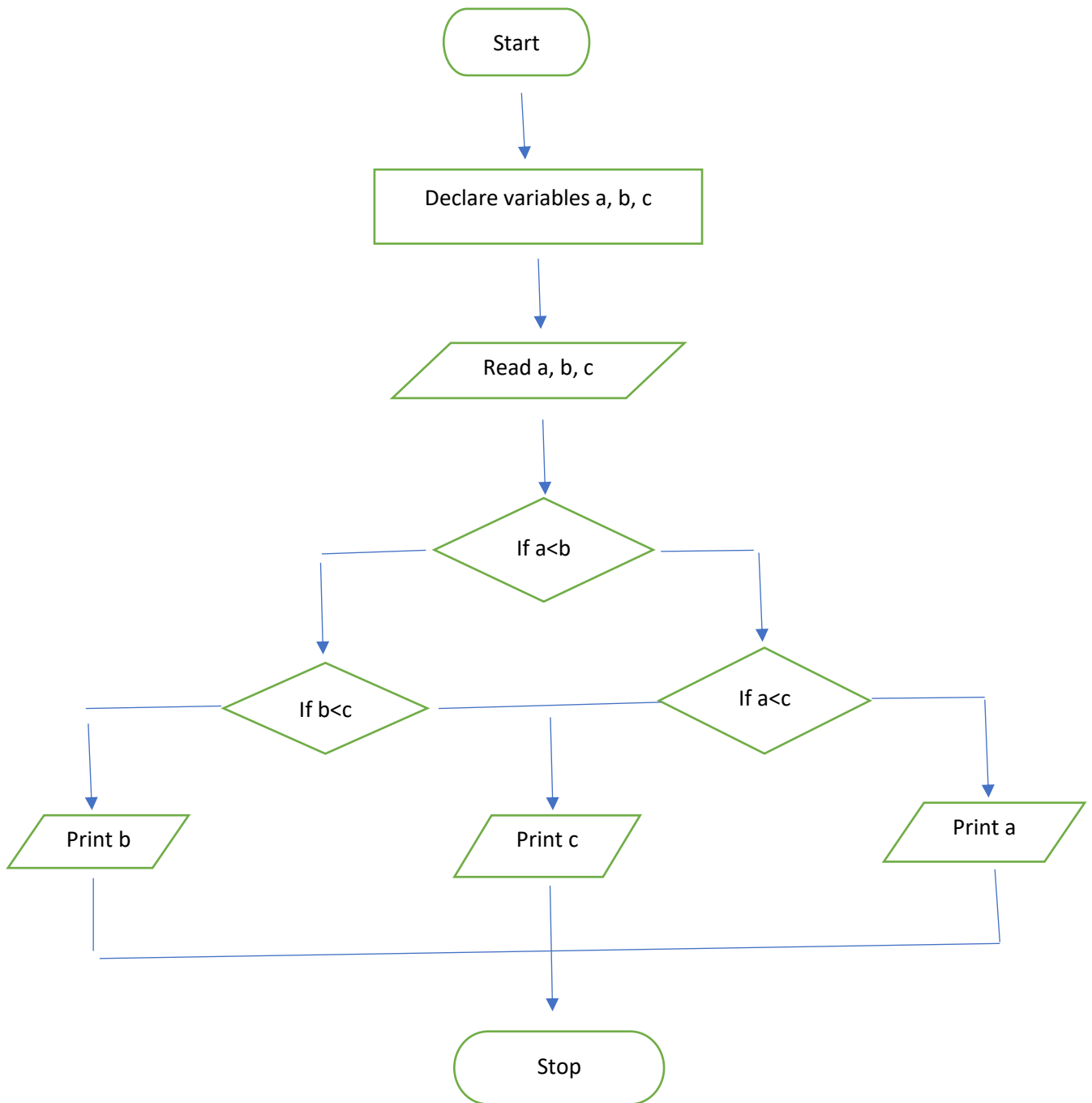
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4. Find the smallest number among three different numbers.



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

