

1. Find student average mark given Mark1 and Mark2.

Step-1: Start

Step-2: Declare values Mark1, Mark2 and Average.

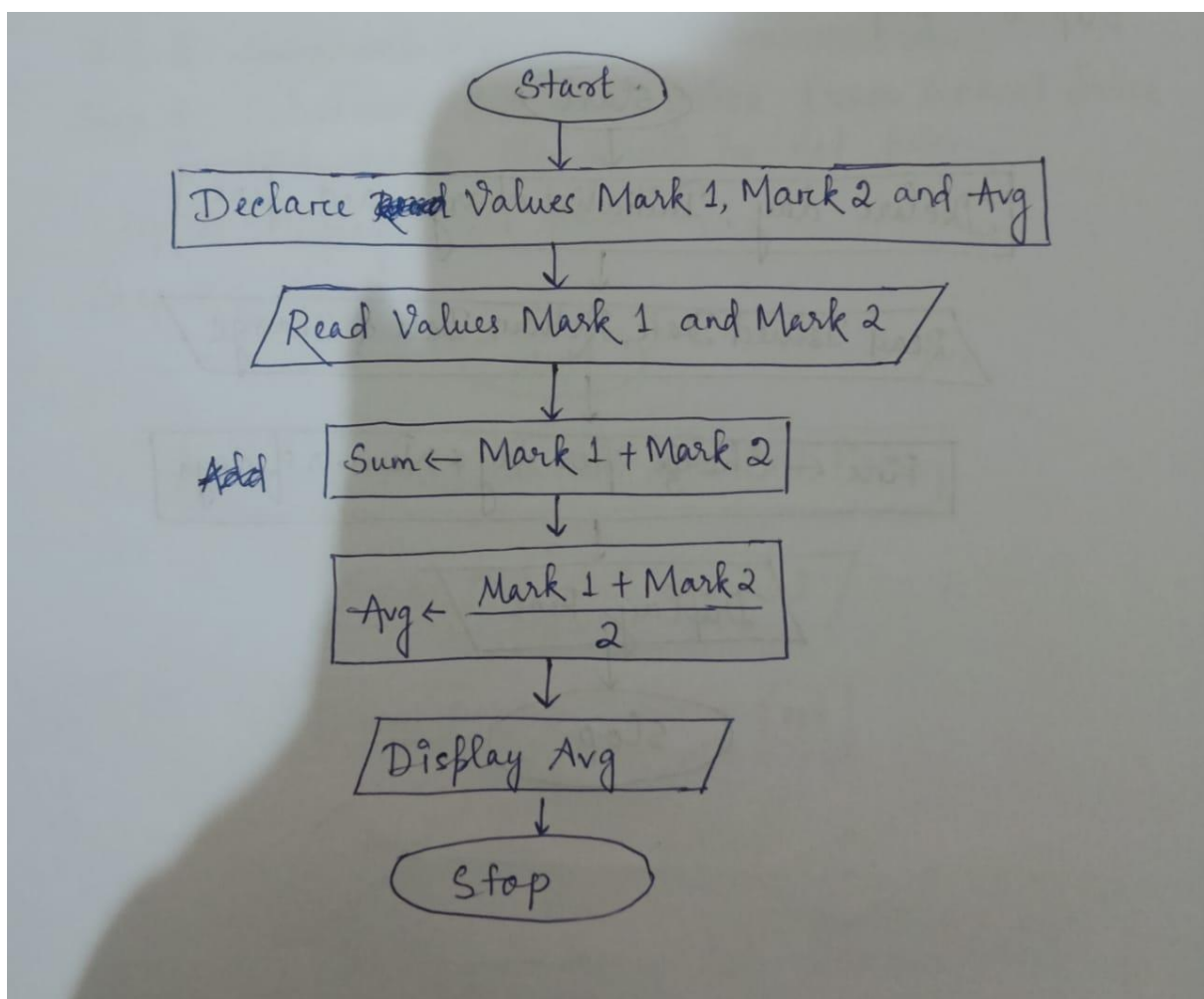
Step-3: Read values Mark1 and Mark2.

Step-4: Add Mark1 and Mark2 and find sum.

Step-5: Divide the sum by 2 and assign the result in avg.

$$\text{avg} \leftarrow (\text{Mark1} + \text{Mark2}) / 2$$

Step-6: Stop



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

Step-1: Start

Step-2: Declare Day, Initialize charge and Fine.

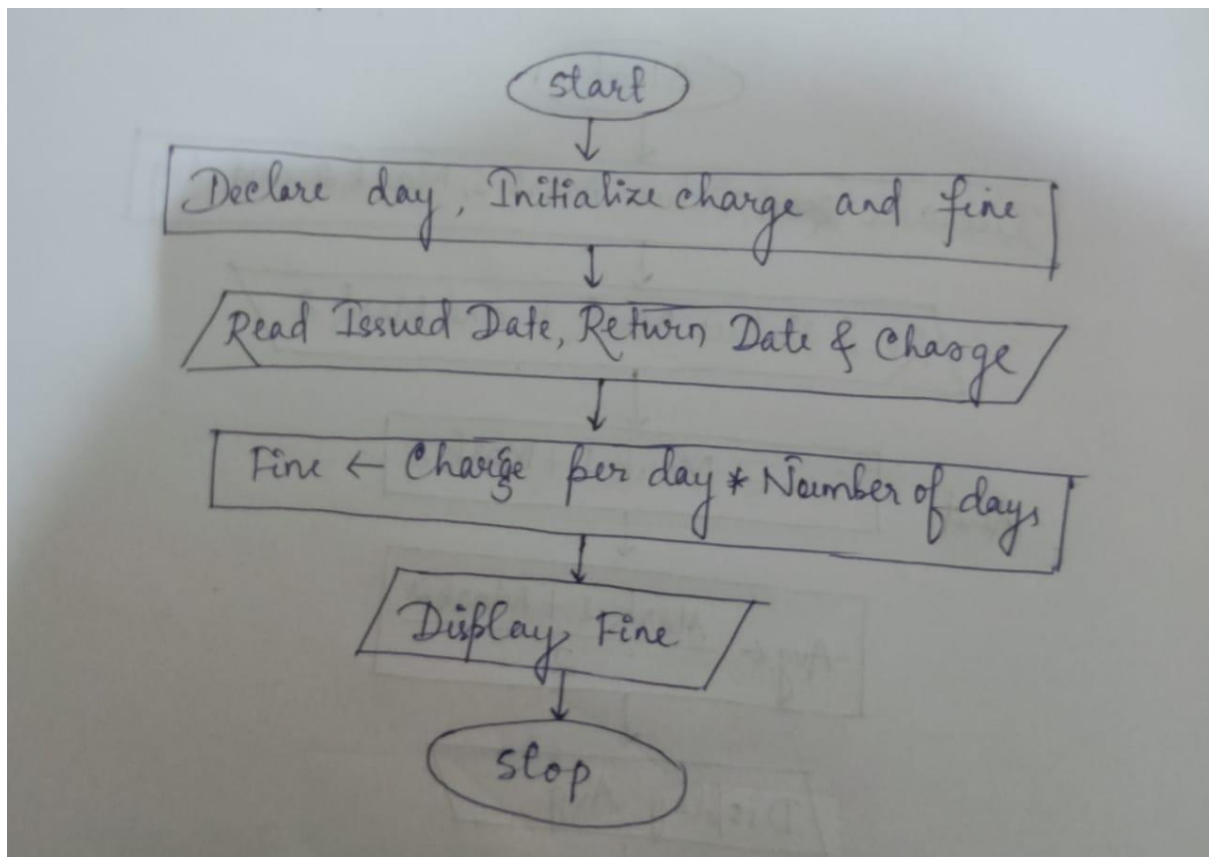
Step-3: Read Issued date, Return date and Charge.

Step-4: Multiply the charge per day and number of days.

$\text{Fine} \leftarrow \text{Charge per day} * \text{Number of days}$

Step-5: Display Fine.

Step-6: Stop.



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

Step-1:Start

Step-2:Declare cost price,discout and net price.

Step-3:Read cost price and discount.

Step-4:Multiply the discount and cost price and find the discount price.

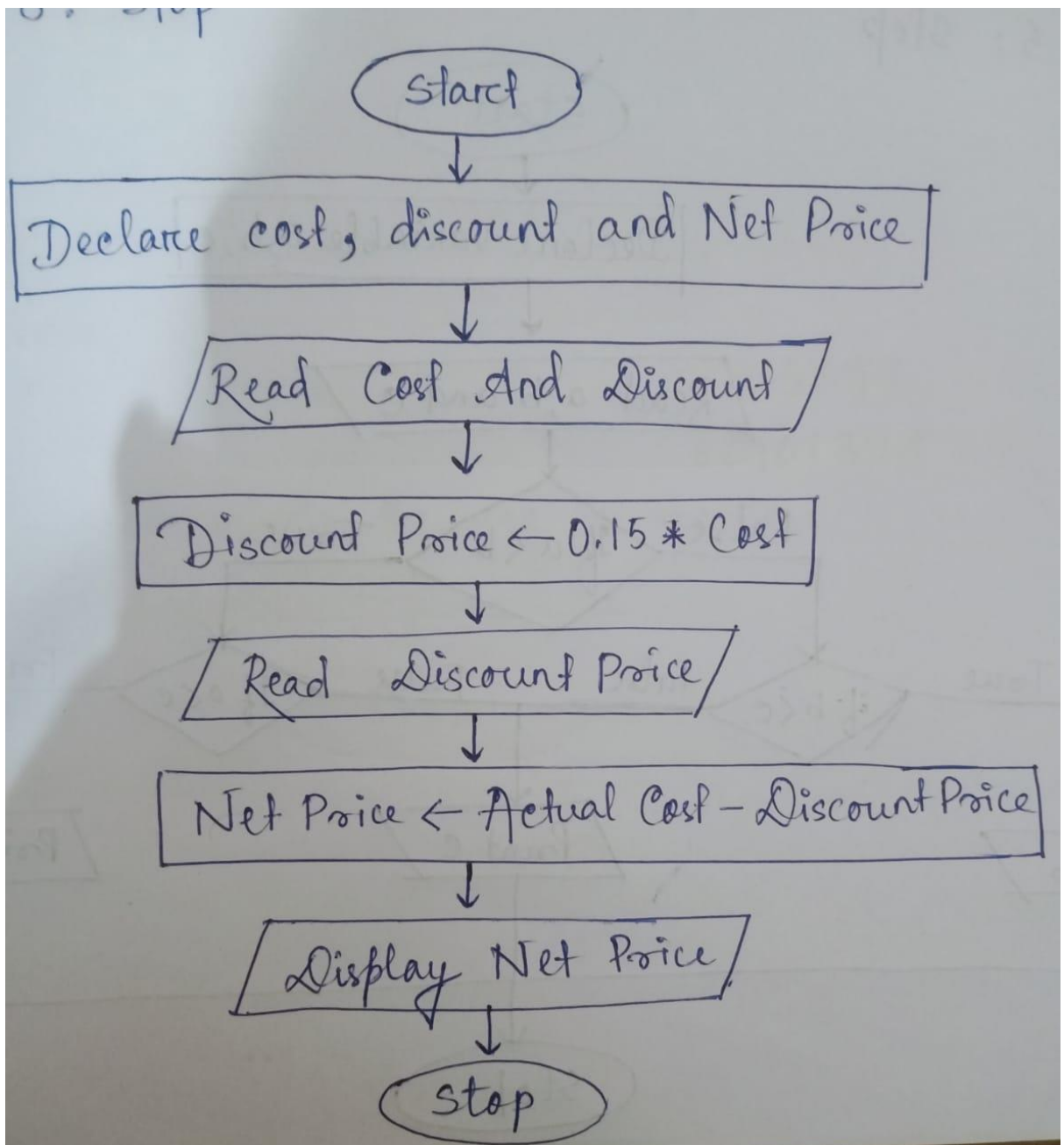
Discount price  $\leftarrow 0.15 * \text{cost}$

Step-5:Read discount price.

Step-6:Substract discount price from cost price and assign the result in the net price.

Step-7:Display Net price.

Step-8:Stop.



4.Find the smallest number among three different numbers.

Step-1:Start.

Step-2:Declare 3 variables a,b and c.

Step-3:Read variables a,b and c.

Step-4:if  $a < b$

    If  $a < c$

        Display 'a' is the smallest number.

    Else

        Display 'c' is the smallest number.

    Else

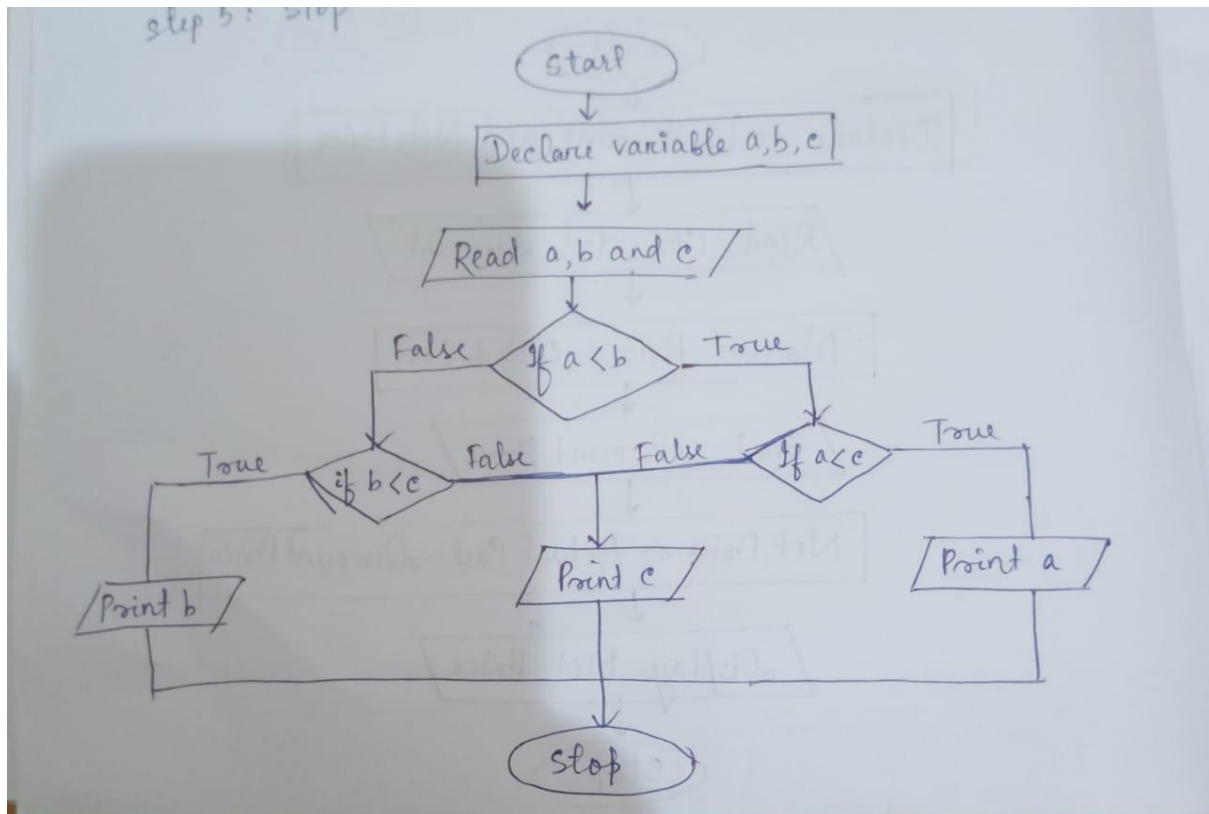
        If  $b < c$

            Display 'b' is the smallest number.

        Else

            Display 'c' is the smallest number.

Step-5:Stop.



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

Step-1: Start

Step-2: Declare the variables a, b, c.

Step-3: Read the variables a, b, c.

Step-4: Find the value of D using the formula

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

Step-5: If D is greater than or equal to zero find 2 roots

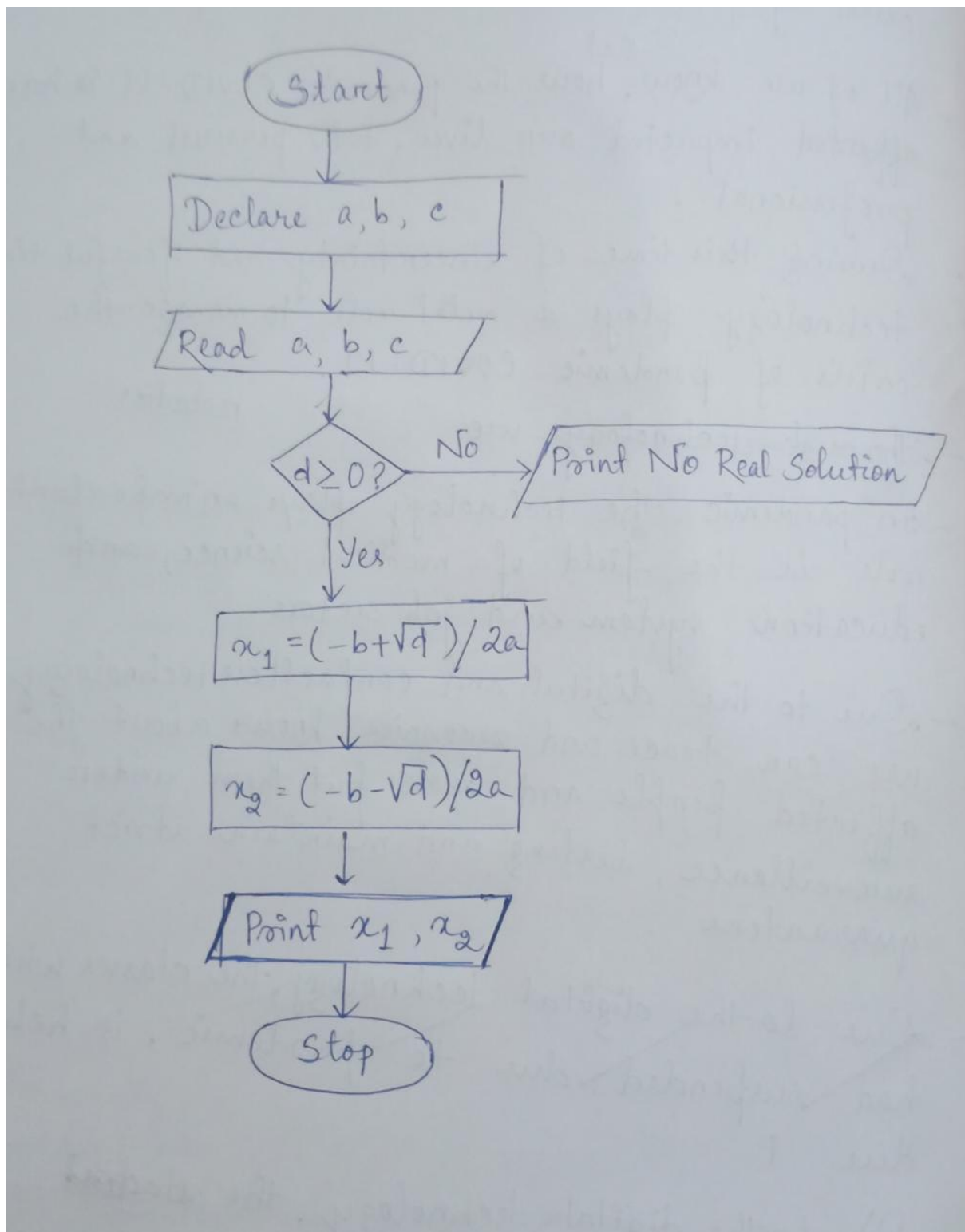
$$X_1 \leftarrow \frac{-b + \sqrt{d}}{2a}$$

$$X_2 \leftarrow \frac{-b - \sqrt{d}}{2a}$$

Step-6:Display  $x_1, x_2$ .

Step-7:If  $D$  is less than zero,then print No real solution.

Step-8:Stop



6. Find the factorial of a given number.

Step-1: Start



Step-2:Declare the variable i,fact,num

Step-3:Read the value of num

Step-4:Initialize counter variable i to 1 fact to 1

Step-5:if  $i \leq \text{num}$  go to step 6 otherwise goto step-7

Step-6: $\text{fact} \leftarrow \text{fact} * i$

Step-7:Increment counter variable i and go to step-5

Step-8:Display fact

Step-9:Stop

