**ASSIGNMENT-1**

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

ALGORITHM

STEP 1: Start.

STEP 2: Declare variables mark1, mark2 and avg.

STEP 3: Read mark1 and mark2.

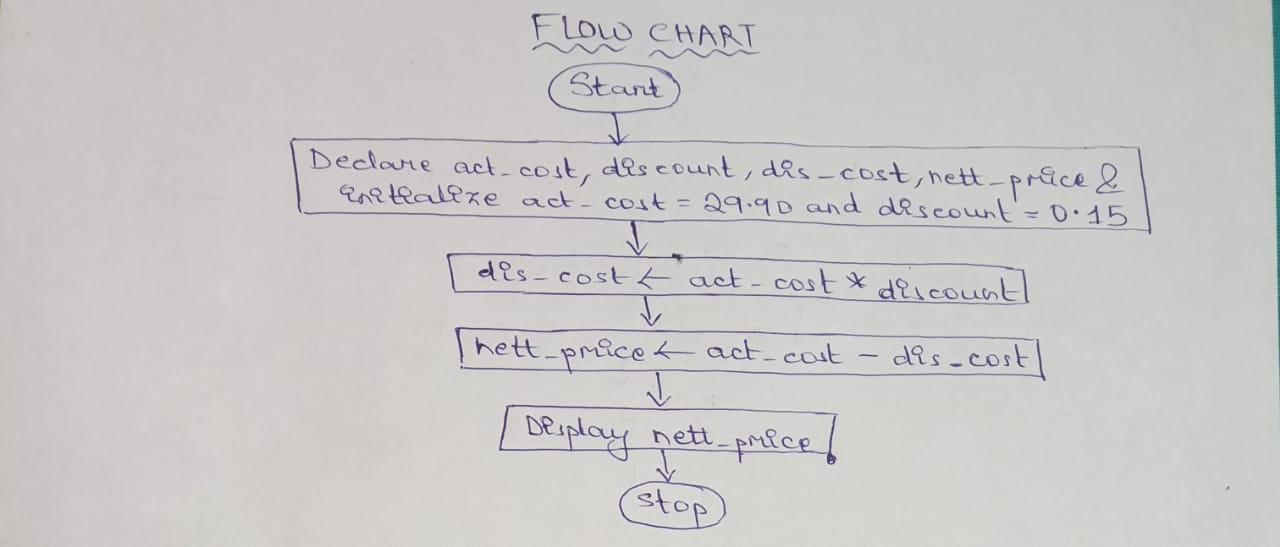
STEP 4: Add mark1 and mark2, then divide them by 2 and assign the value to avg.

avg 🡨 (mark1+mark2)/2

STEP 5: Display avg.

STEP 6: Stop.

FLOW CHART



2. Calculate the total fine charged by library for late-return books. The

charge is 0.20 INR for 1day.

ALGORITHM

STEP 1: Start.

STEP 2: Declare variables t\_fine, days\_late, chr\_per\_day and

initialize chr\_per\_day = 0.20 .

STEP 3: Read days\_late.

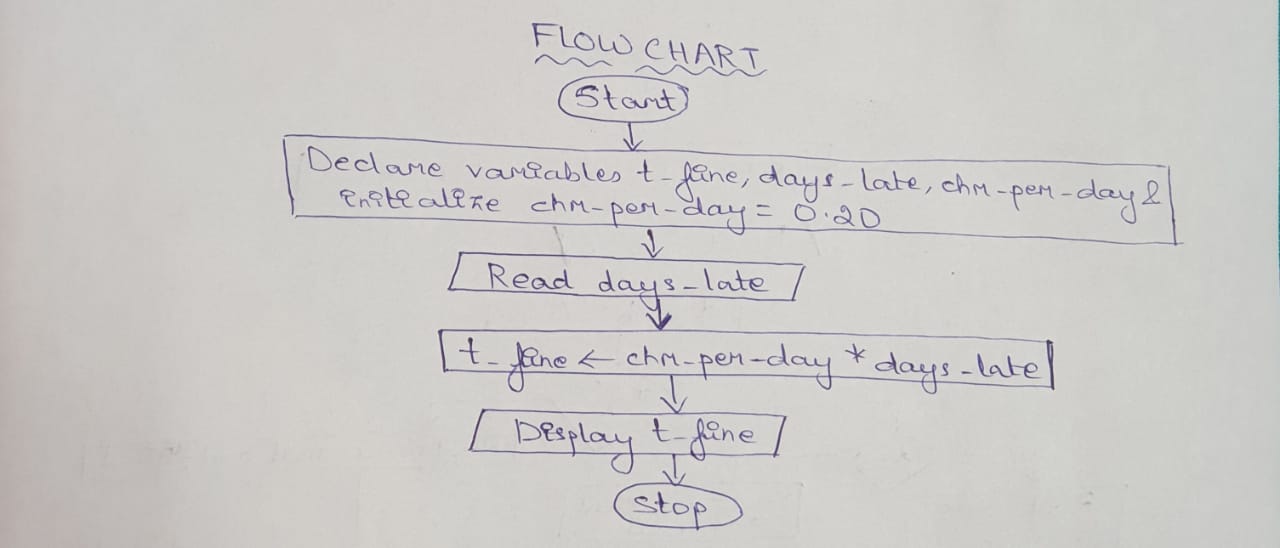
STEP 4: Multiply chr\_per\_day with days\_late and assign it to t\_fine.

t\_fine 🡨 chr\_per\_day \* days\_late

STEP 5: Display t\_fine.

STEP 6: Stop.

FLOW CHART



3. You had bought a nice shirt which cost Rs.29.90 with15% discount.

Count the nett price for the shirt.

ALGORITHM

STEP 1: Start.

STEP 2: Declare variables act\_cost, discount, dis\_cost, nett\_price and

initialize act\_cost= 29.90 and dis= 0.15.

STEP 3: Multiply act\_cost with dis and assign the value to dis\_cost.

dis\_cost 🡨 act\_cost \* dis

STEP 4: Subtract dis\_cost from the act\_cost and assign the value to

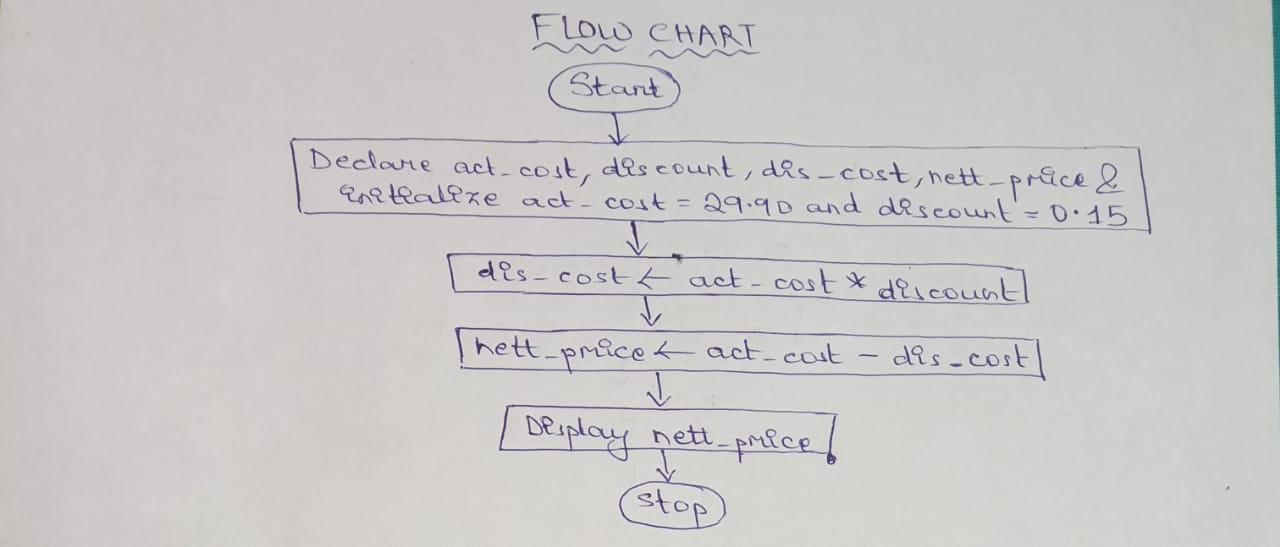
nett\_price.

nett\_price 🡨 act\_cost – dis\_cost

STEP 5: Display nett\_price.

STEP 6: Stop.

FLOW CHART



4. Find the smallest number among three different numbers.

ALGORITHM

STEP 1: Start.

STEP 2: Declare variables x, y and z.

STEP 3: Read x, y and z.

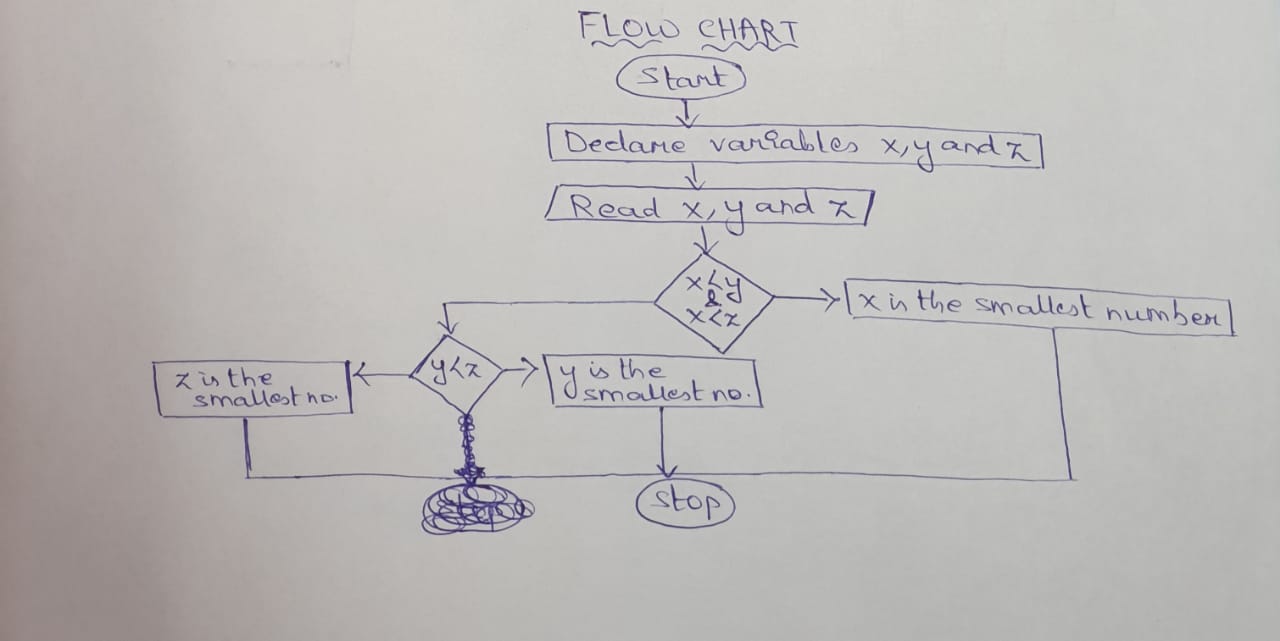
STEP 4: If x < y and x < z , then x is the smallest number.

STEP 5: Else if y < z , then y is the smallest number.

STEP 6: Else z is the smallest number.

STEP 7: Stop.

FLOW CHART



5. Find the Roots of a quadratic equation ax2+ bx + c = 0.

ALGORITHM

STEP 1: Start.

STEP 2: Declare variables a, b, c and d.

STEP 3: Read a, b and c.

STEP 4: Calculate d , i.e.

d 🡨 b2 – 4ac

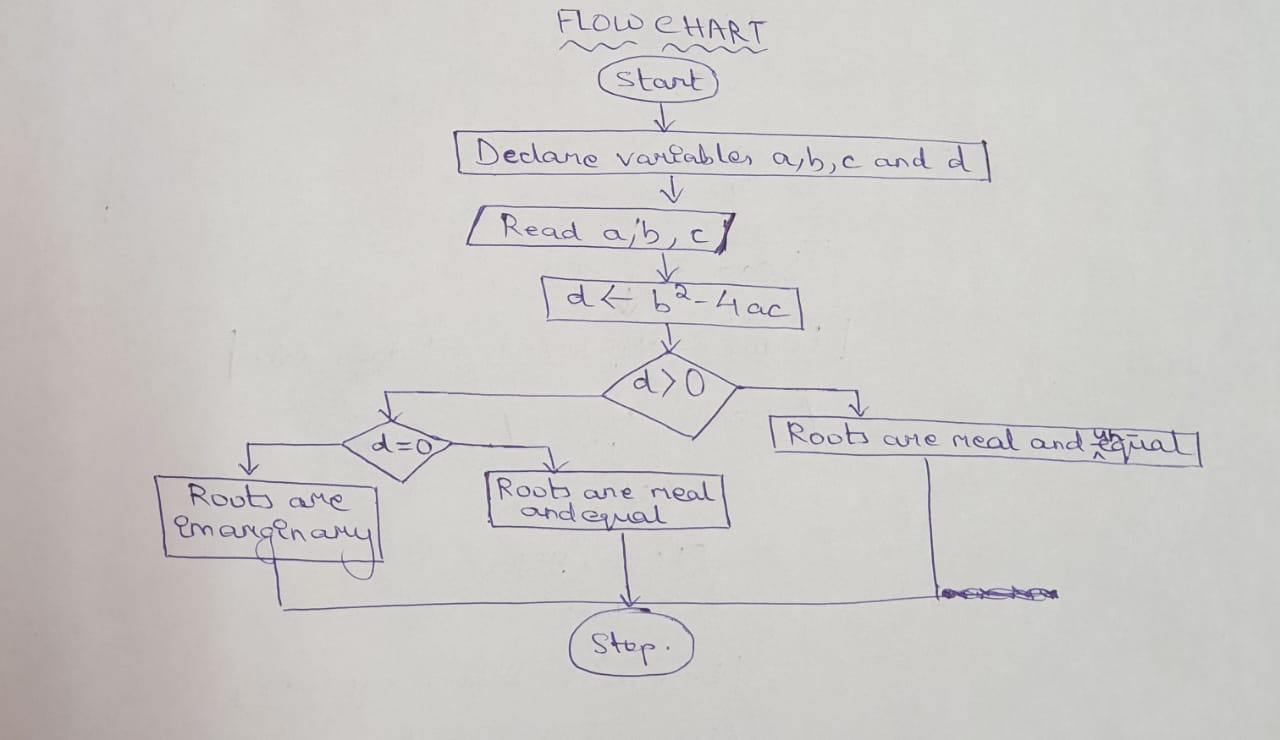
STEP 5: If d > 0, then roots are real and unequal.

STEP 7: Else if d = 0, then roots are real and equal.

STEP 8: Else roots are imarginary.

STEP 9: Stop.

FLOW CHART



6. Find the factorial of a given number.

ALGORITHM

STEP 1: Start.

STEP 2: Declare variables num, fact and initialize fact = 1.

STEP 3: Read num.

STEP 4: fact 🡨 fact \* num

STEP 5: num 🡨 num - 1

STEP 6: Repeat the above 2 steps until num > or =1.

STEP 7: Display fact.

STEP 8: Stop.

FLOW CHART

