MD. Rasel Hossain, 19,8,2020 Final Exam
ID-163432521, SQA-403

Answer to the Question no-2

Domain Error

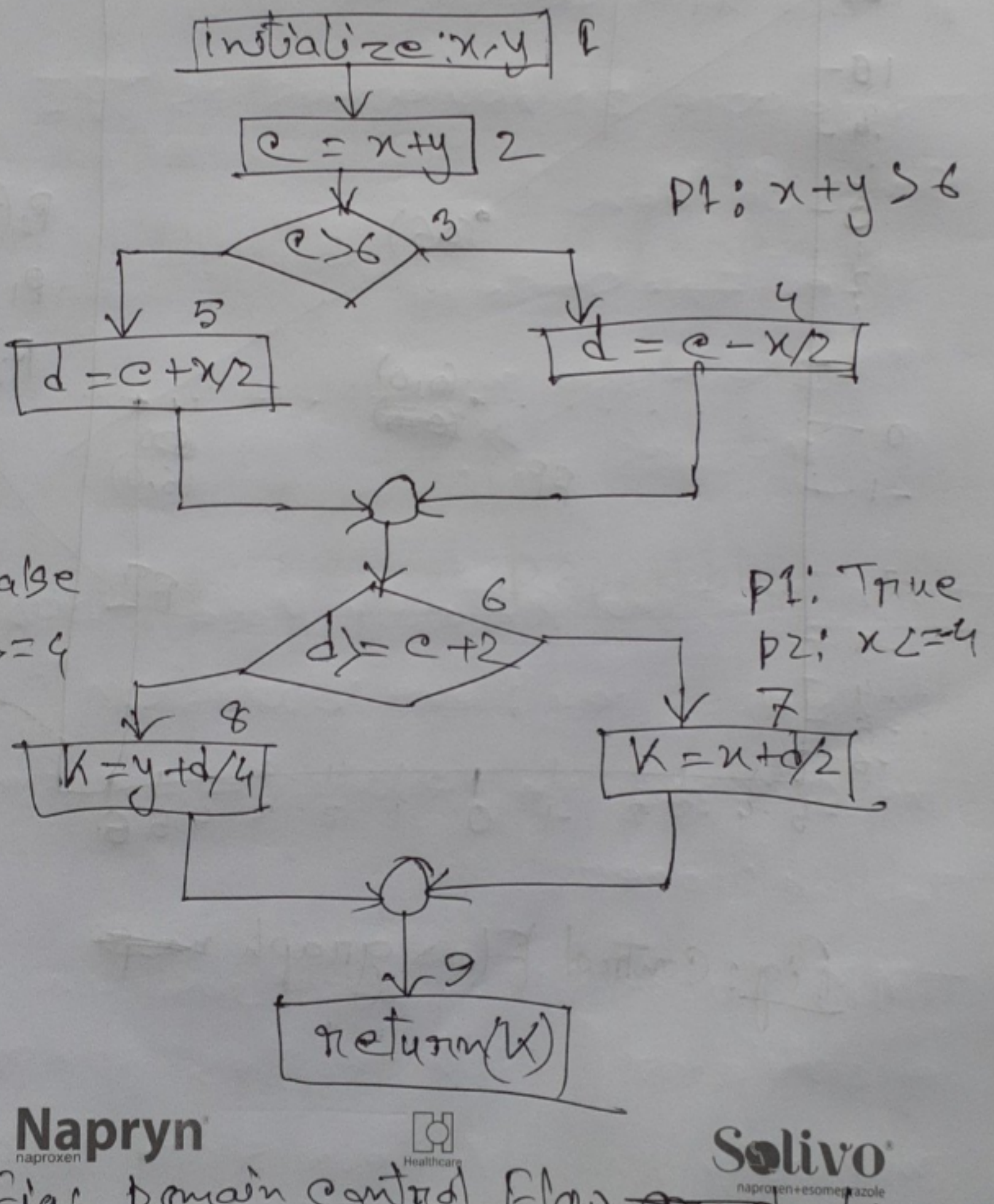


Fig: Domain control Flow ~~graph~~ diagram.

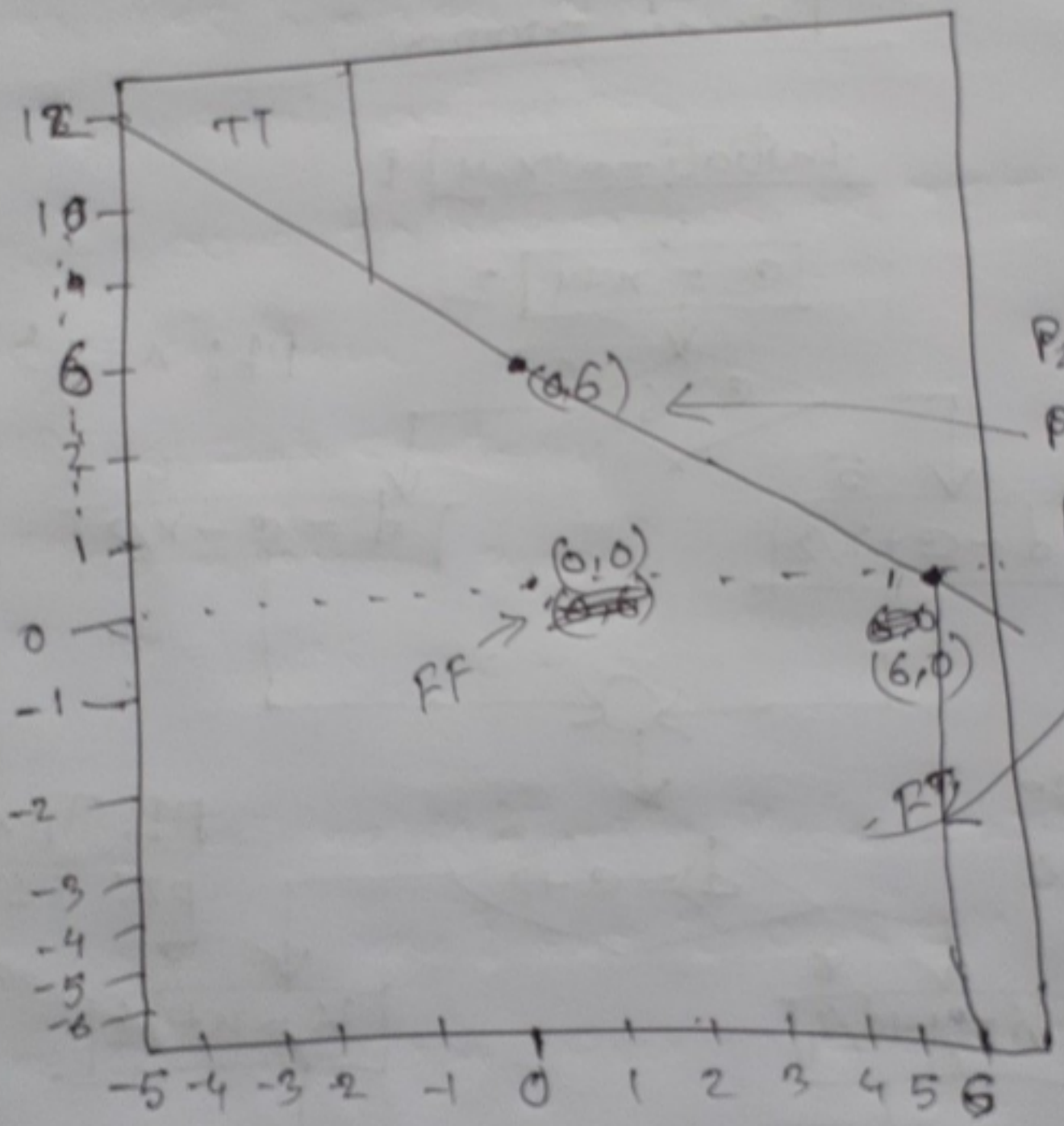


Fig: Control Flow graph

Answer to the Question-(5)

CMM - capability Maturity Model.

The CMM model, maturity level of an organization, thats ~~extent~~ can produce low cost, high quality software.
we know the current maturity level. an organization can work to reach the next higher level.
Five level of CMM.

(I) Level 1 ~~Repeatable~~
(II) Level 2 ~~Defined~~ Repeatable
(III) Level 3 Defined
(IV) Level 4 Managed
(V) Level 5: optimizing

TPI = Test process Improvement. A test process is a certain way of performing activities related to defect detection.

A few such activities

there are 20 key areas is TPI

Some of them

① Test ~~Stata~~ Strategy.

② Life-cycle model

③ Metrics .....

TMM: Testing Maturity Model. was pioneered by Ilene Burnstein to help the organization, evaluate and improve testing process.

TMM framework describe an evolutionary path of test process maturity in five levels or stages

Five Levels are:

(I) Level 1: initial

(II) Level 2: phase Definition

(III) Level 3: integration

(IV) Level 4: Management and Measurment

(V) Level 5: optimization.

Answer to the question no - (4)

ON point:- It is a point on the boundary or very close to the boundary.

OFF point: An OFF point of a boundary lies away from the boundary.

~~an point boundary consider. x<6 & x>-6~~

Open: An off find of the boundary is an ~~interior of~~ inlerior point inside the domain within an ε-distance from the boundary (ε=small)

Closed: An off point of that boundary is an exterior point outside the boundary with an ε-distance

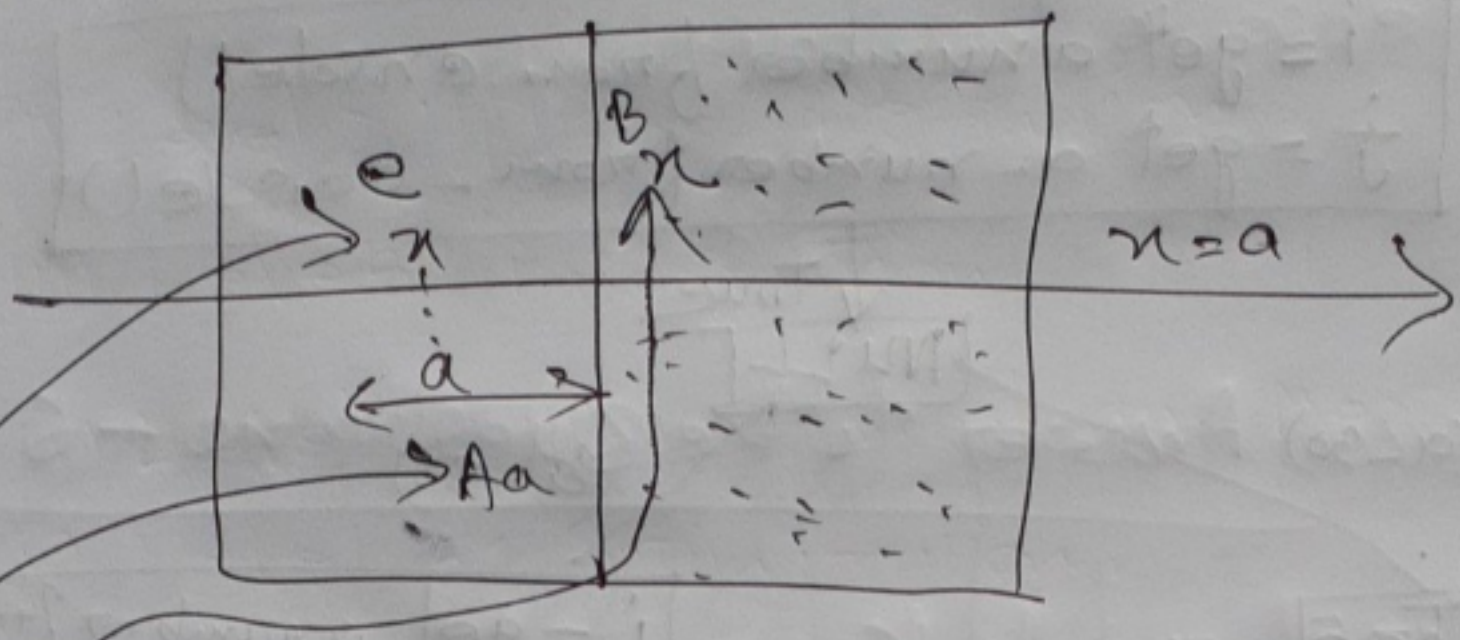
ON & OFF points

Consider the domain are ($x<6$ & $x<6$)

open with respect to D1

closed with respect to D2

domain D1 ($x < 0$) domain D2 ($x \geq 0$)



An on point For D1 & D2 (very close to the boundary)

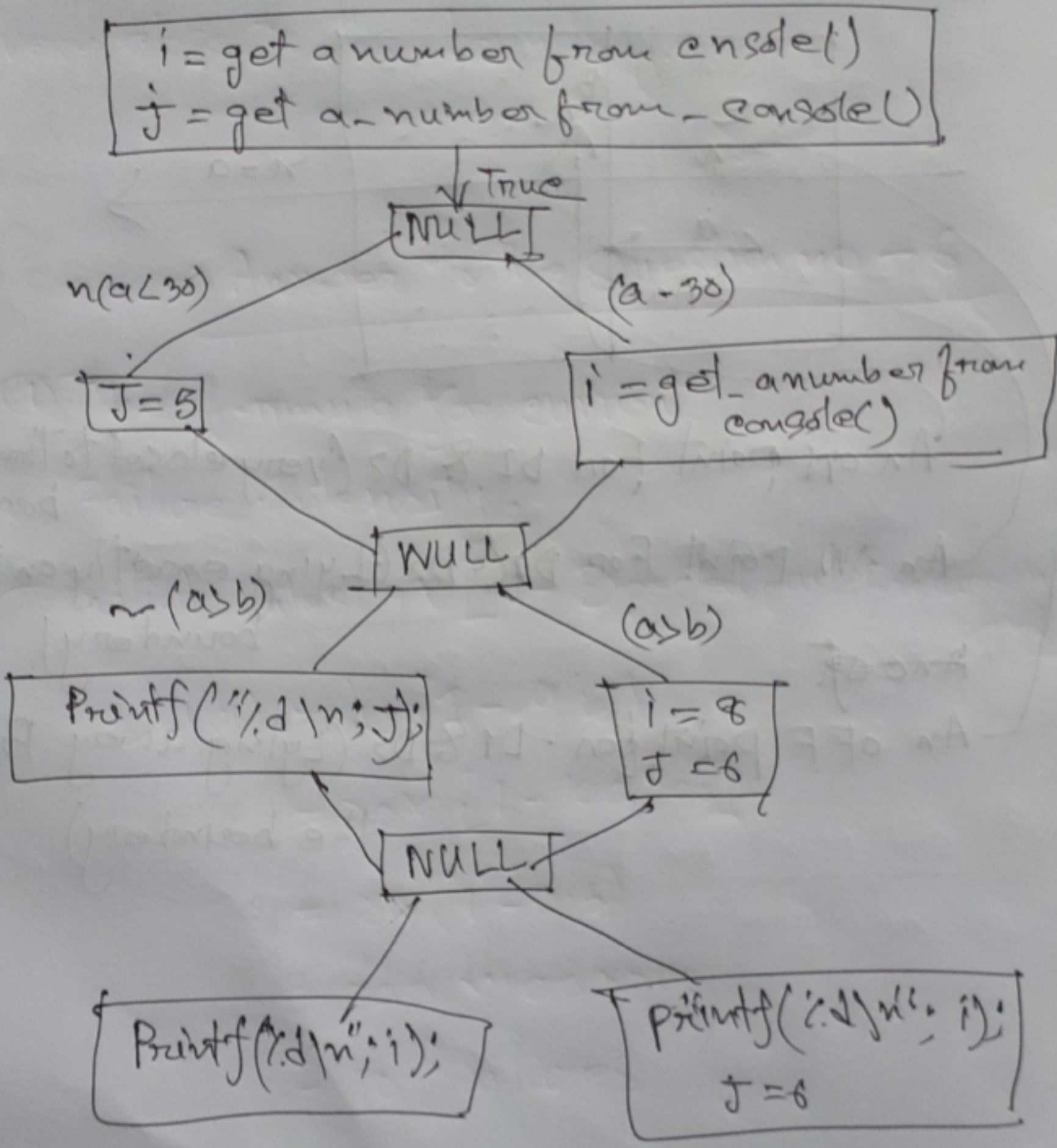
An ON point For D1 & D2 (Lying exactly on the boundary)

~~Anoff~~

An oFF point for D1 & D2 (Lying away From the boundary)

Answer to the Question no-(1)

Data Flow diagram



Answer to the Question no-(7)

Given that,

$x+0.3xy<6 \quad | \quad x+y>7$

there, we ~~eq~~ consider $x=0$

$0+0.3*y \leq 6$

$\Rightarrow 0.3*y \leq 6$

$\therefore y \leq 20$ | $y>7$

Now, $x=-5$

$-5+0.3xy \leq 6$

$\Rightarrow 0.3*y \leq 1$

$\therefore y \leq 3.333$ | $5+y>y=2$

again we $x=-1$

$-1+0.3*y \leq 6$

$0.3*y \leq 5$

$y=16.666$ | $-1+y>y=6$

this 16.666 is nearer to 16.67; doesn't not fail from produce. it is on point boundary very close to the boundary.

Answer to the Question no - 6

(i) The formula for current Failure Intensity.

initial intensity x [1 - Expected fail / Failure in hind]

$$\mu(\tau) = \lambda_0 (1 - \mu/\nu_0)$$

$$= 20 \times [1 - 100/200]$$

$$= 20 (1 - 0.5)$$

$$= 200 \times 100 \times 200$$

$$= 10 \text{ failures}$$

Answer to the Question no-3

given that

λ_0 and λ_π are the constant failure intensity

$$\lambda_e = \lambda(\tau_e)\lambda_0 \quad eb\ \tau_e/v_0$$

$$\lambda_\pi = \lambda(\tau_\pi) = (e.\lambda_0 \tau_\pi(v_0)$$

$$v_0 = 20$$

$$\lambda_e = 2$$

$$\lambda_e = 0.03$$

$$\lambda_e/\lambda_\pi = e(\tau_\pi - \tau_e)\frac{\lambda_0}{v_0}$$

$$\tau_\pi - \tau_{ei} = \frac{v_0}{\lambda_0} \ln\left(\frac{\lambda_e}{\lambda_\pi}\right)$$

$$= \frac{80}{20} \ln \frac{20}{403}$$

$$= 4 \times 6.502$$

$$= 26.009 \text{ hours}$$