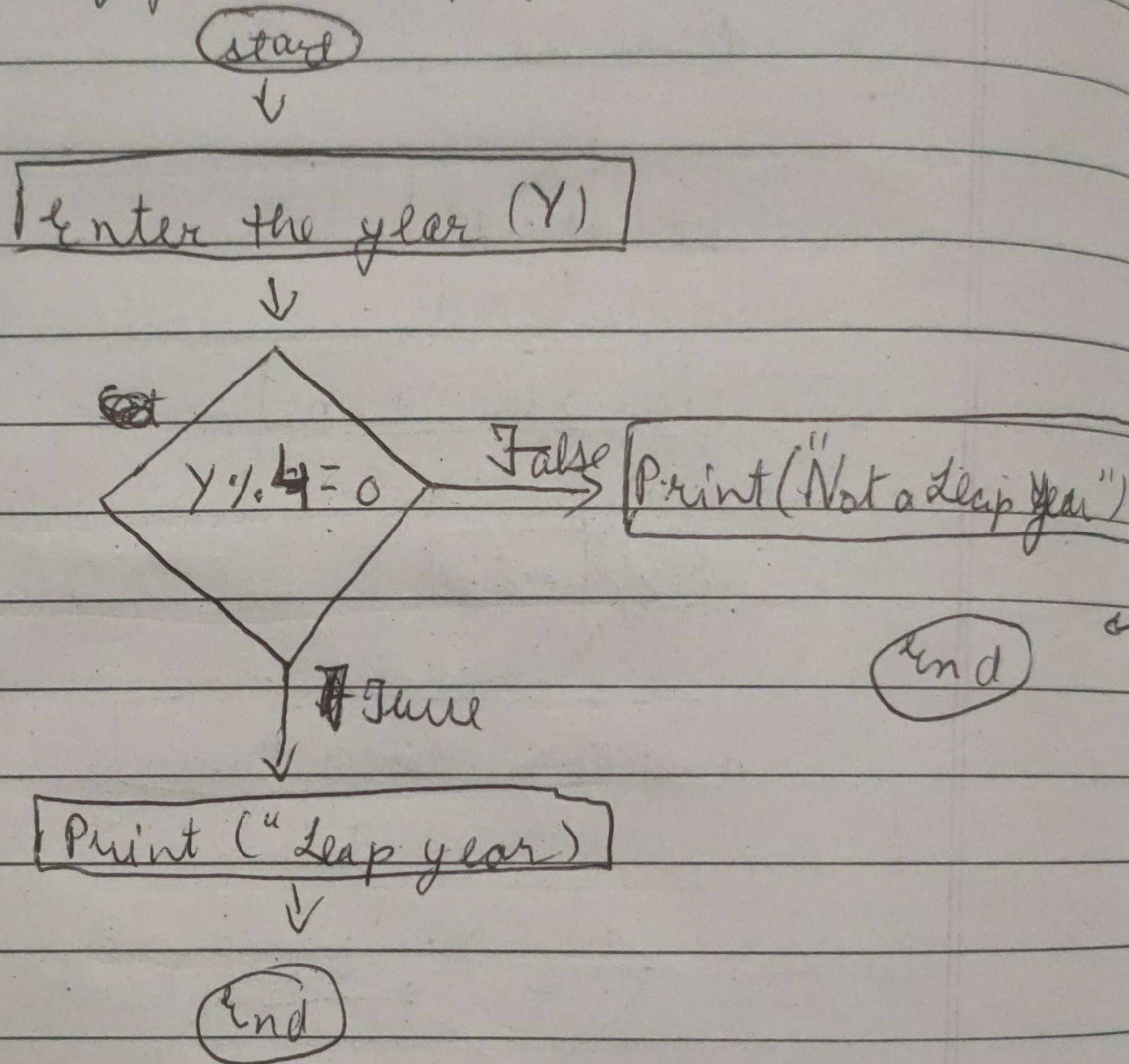


Q 1) Check if year is leap year or not



Algo  $\rightarrow$  1. Enter the year (Y) by user

2. If  $Y \% 4 = 0$

Print ("Leap year")

else

Print ("Not a leap year")

Q2. Write algo to print all odd no.s backward from 99 to 1

Ans: <sup>(n)</sup>  
i) Initialize ~~n~~ = 99

ii) If  $n \% 2 \neq 0$

~~Print~~ Print(n)

else ~~goto step ii)~~

go to step ii)

iii) Set  $n = n - 1$

iv) If  $n \geq 1$

go to step ii)

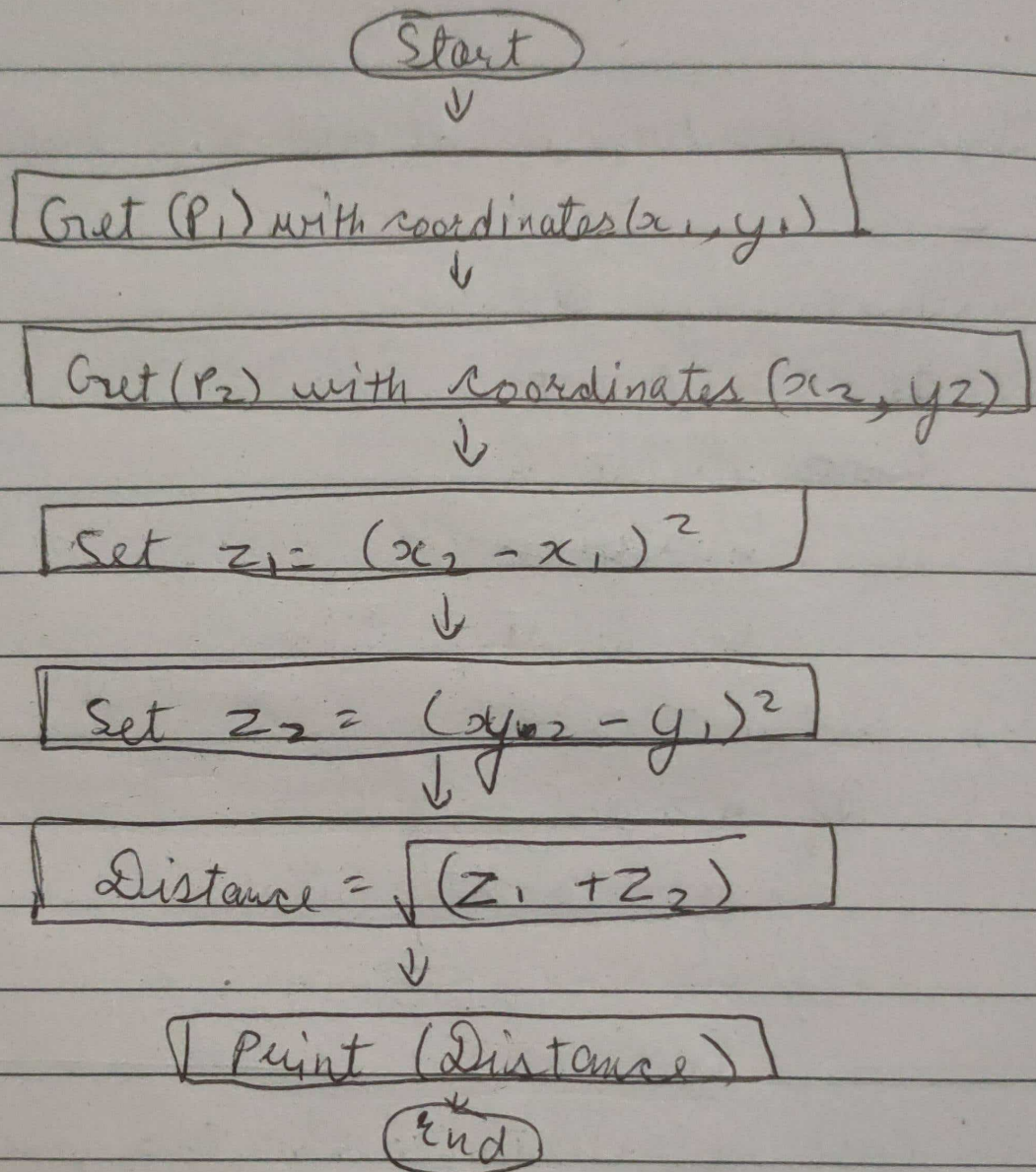
else

end



Q3.

Program for  
dist. b/w 2  
points.



Algo → i) Get Point  $P_1$  with coordinates  $(x_1, y_1)$  &  $P_2$  with  $(x_2, y_2)$ .

ii) Set  $z_1 = (x_2 - x_1)^2$

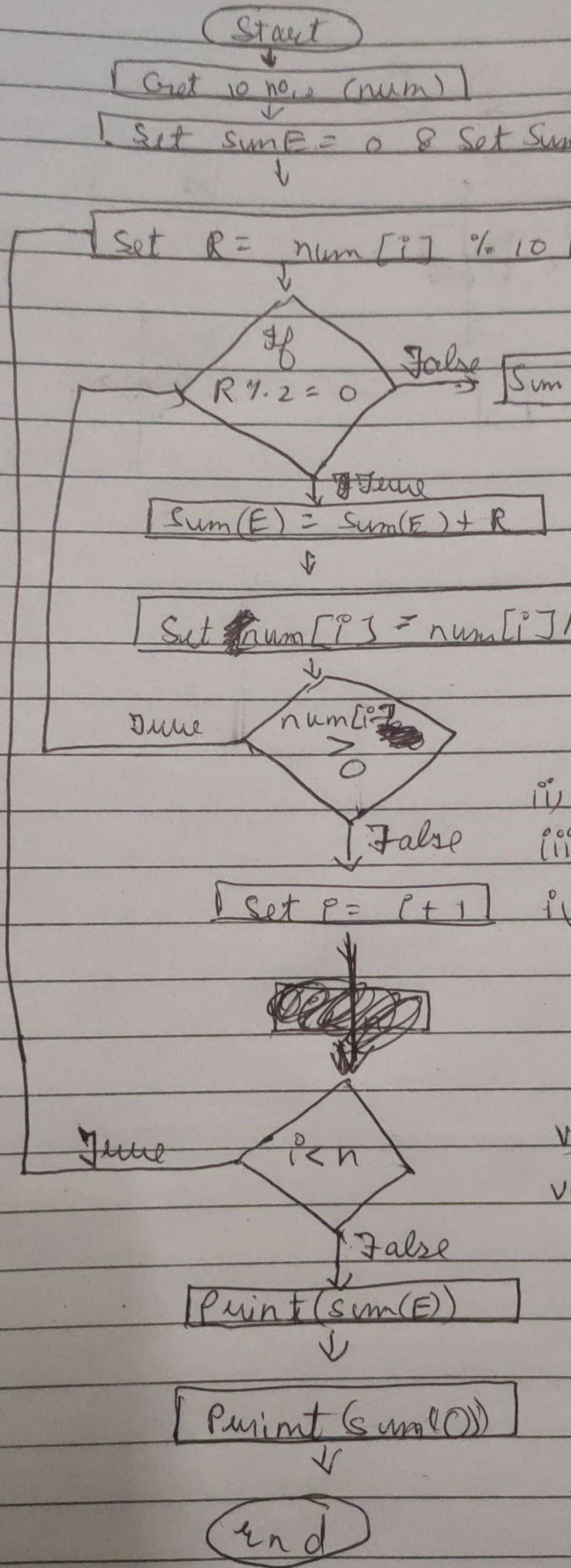
iii) Set  $z_2 = (y_2 - y_1)^2$

iv) Set Distance =  $\sqrt{z_1 + z_2}$

v) Print Distance



Q4.



Algo → P) Get no. (num)

i) Set sumE = 0 & sumO = 0

ii) Set R = num[i] % 10

iv) If  $R \% 2 == 0$

sumE = sumE + R

else

sumO = sumO + R

v) Set num[i] = num[i] / 10

vi) If num[i] > 0

go to step iv

else

set i = i + 1

vii) If i < n

go to step (vi)

else

Print(sum(E)) &&

Print(sum(O))



Qs. Calculate product of digits of no.

Ans. ~~Get the~~

Start

↓

Get the number (N)

↓

Set  $P = 1$

↓

Set  $R = N \% 10$

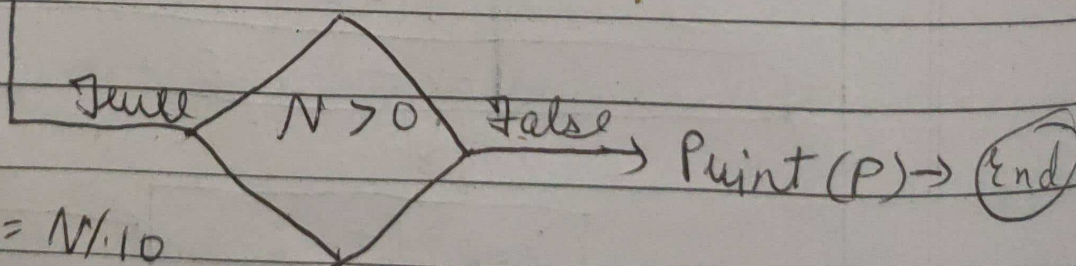
↓

Set  $P = P \times R$

↓

Set  $N = N / 10$

↓



Algo →

i) Get Number (N)

ii) Set  $P = 1$  <sup>prod</sup>  $R = N \% 10$

iii) Set  $P = P \times R$

iv) Set  $N = N / 10$

v) If  $(N > 0)$

go to step ii)

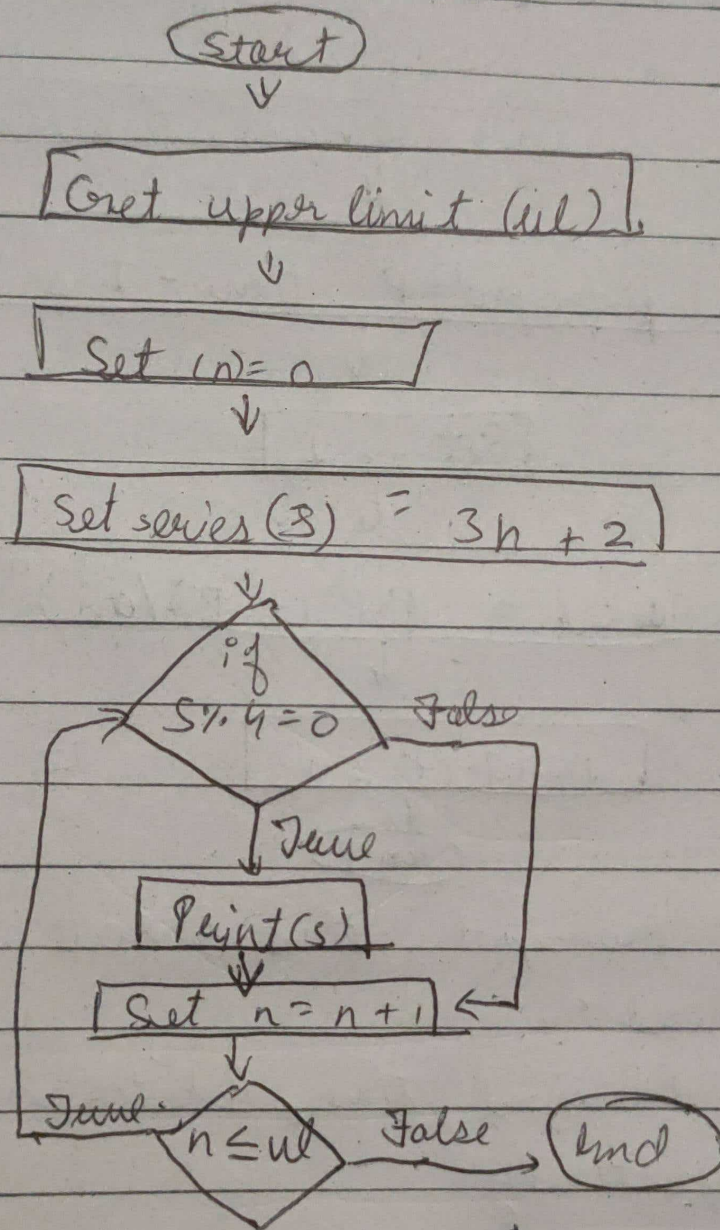
else

Print(P)



Q6. Print  $x$  term of the series  $3N+2$  which are multiples of 4.

Ans 6-



Algo → i) Get upper limit (ul)

ii) Set  $n = 0$

iii) Set series  $(S) = 3n + 2$

iv) If  $(S \% 4 = 0)$

Print(s)

else

go to step v)



v) Set  $n = n + 1$

vi) If  $(n \leq ul)$

go to step (iv)

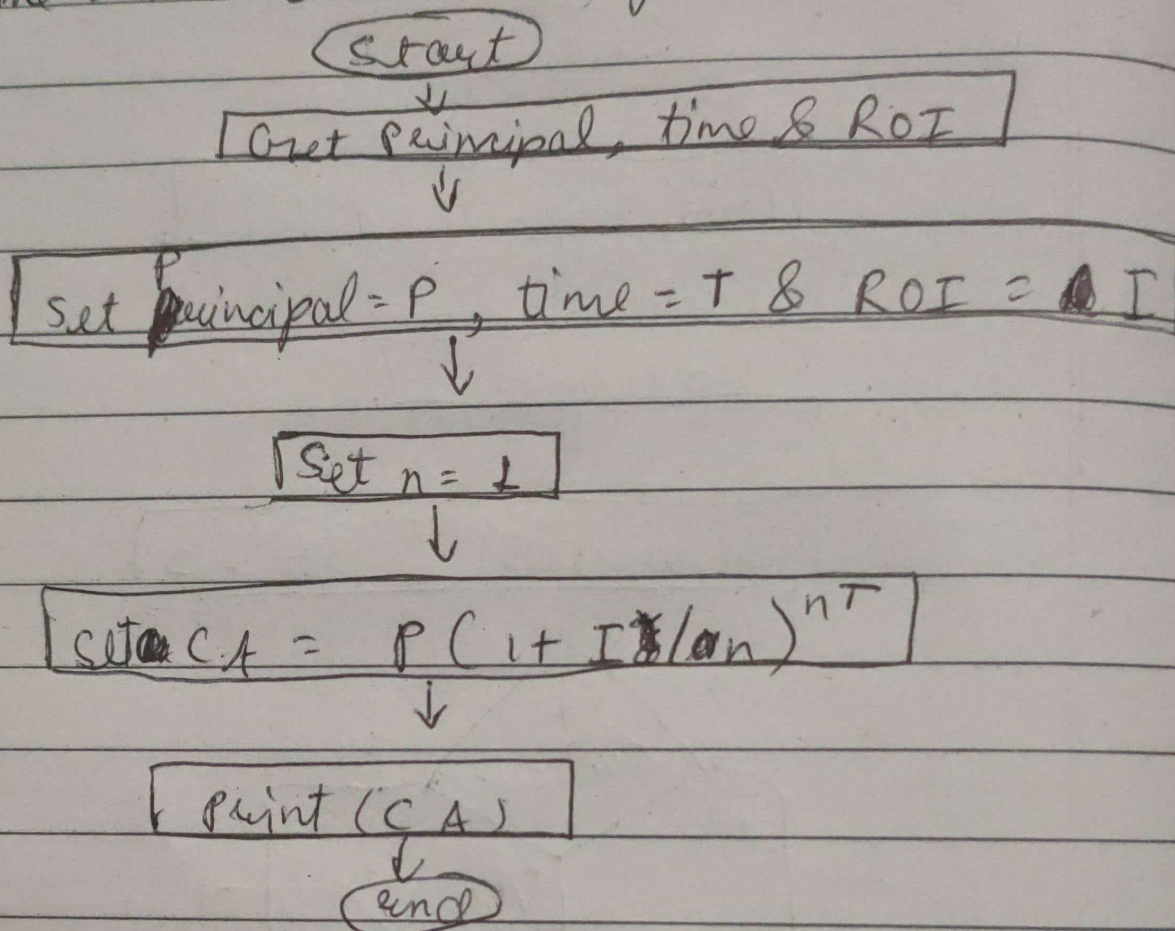
else

stop.



Q7. To find compound interest, provided principal, time & ROI are taken by user.

Ans 7.



Algo → i) Get Principal, time & rate of interest by users.

ii) Set Principal, time, & rate of interest as P, T, I respectively.

iii) Set  $n =$  no. of times interest is compounded as 1.

iv) Set compound interest  $CA = P(1 + I/n)^{nT}$

v) Print (CA)