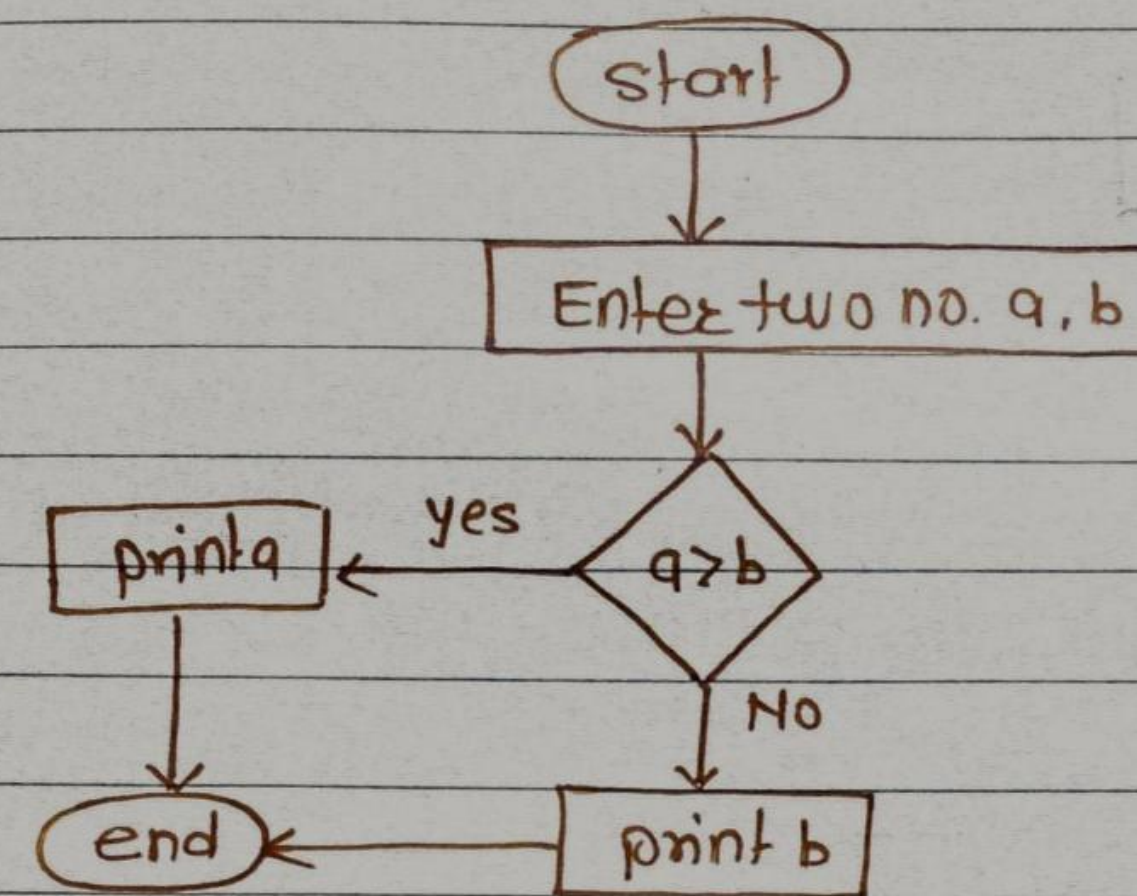
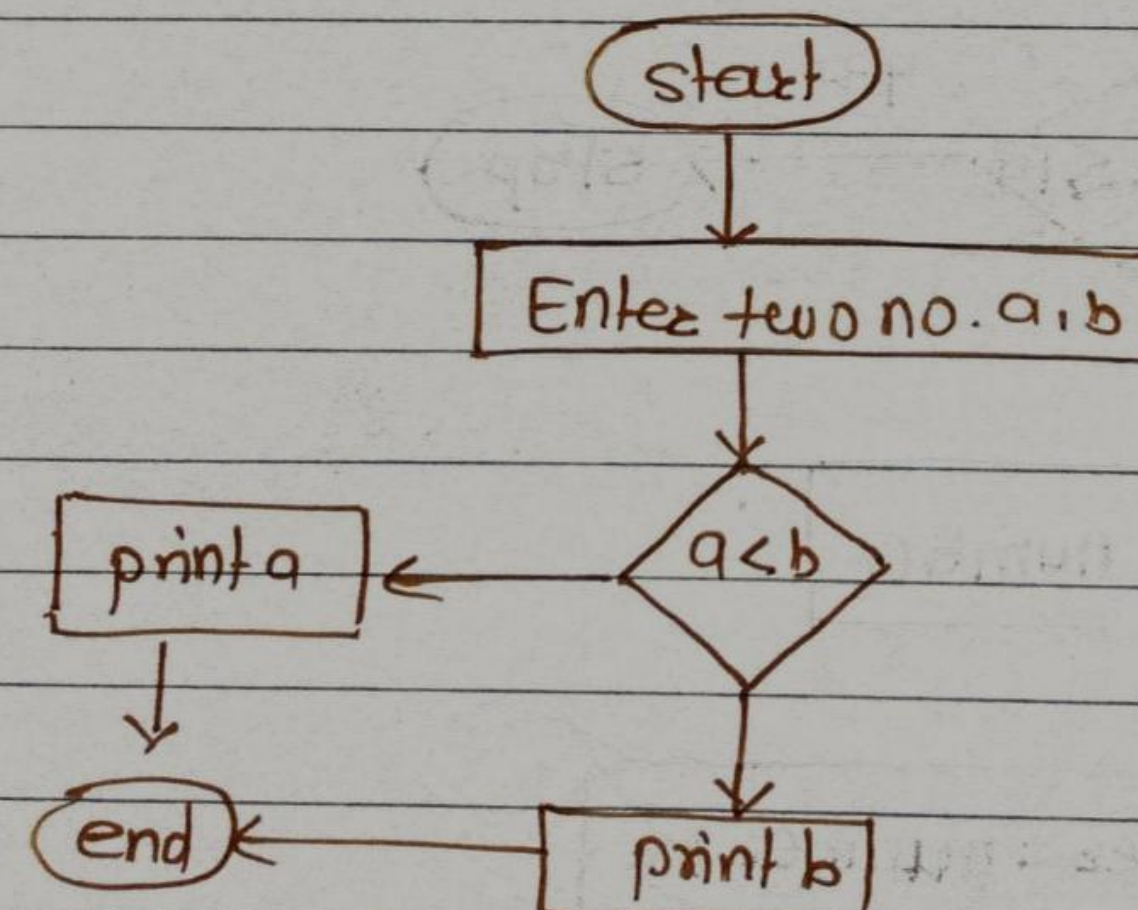


Assignment . 1

a] Check two numbers and print maximum of two numbers.



b] Check two numbers and print minimum of two numbers.

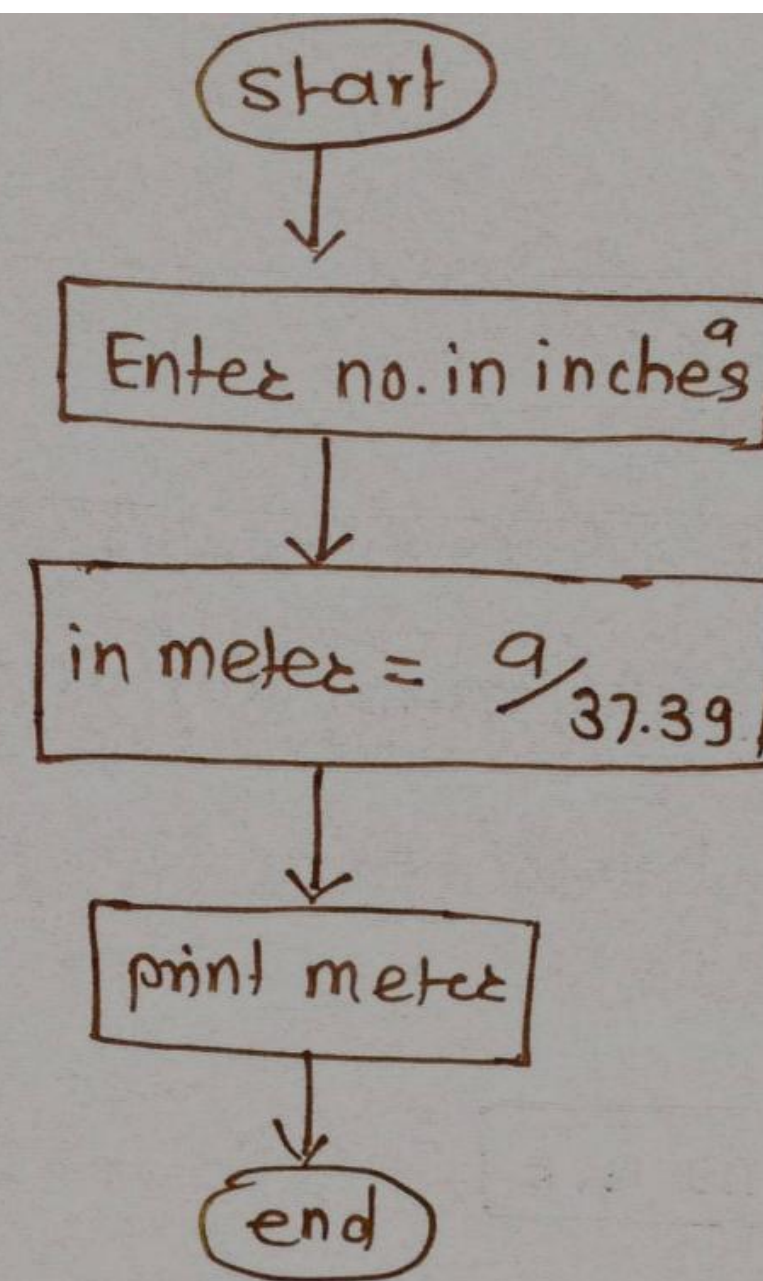


c] Reads a number in inches, convert it to meter.

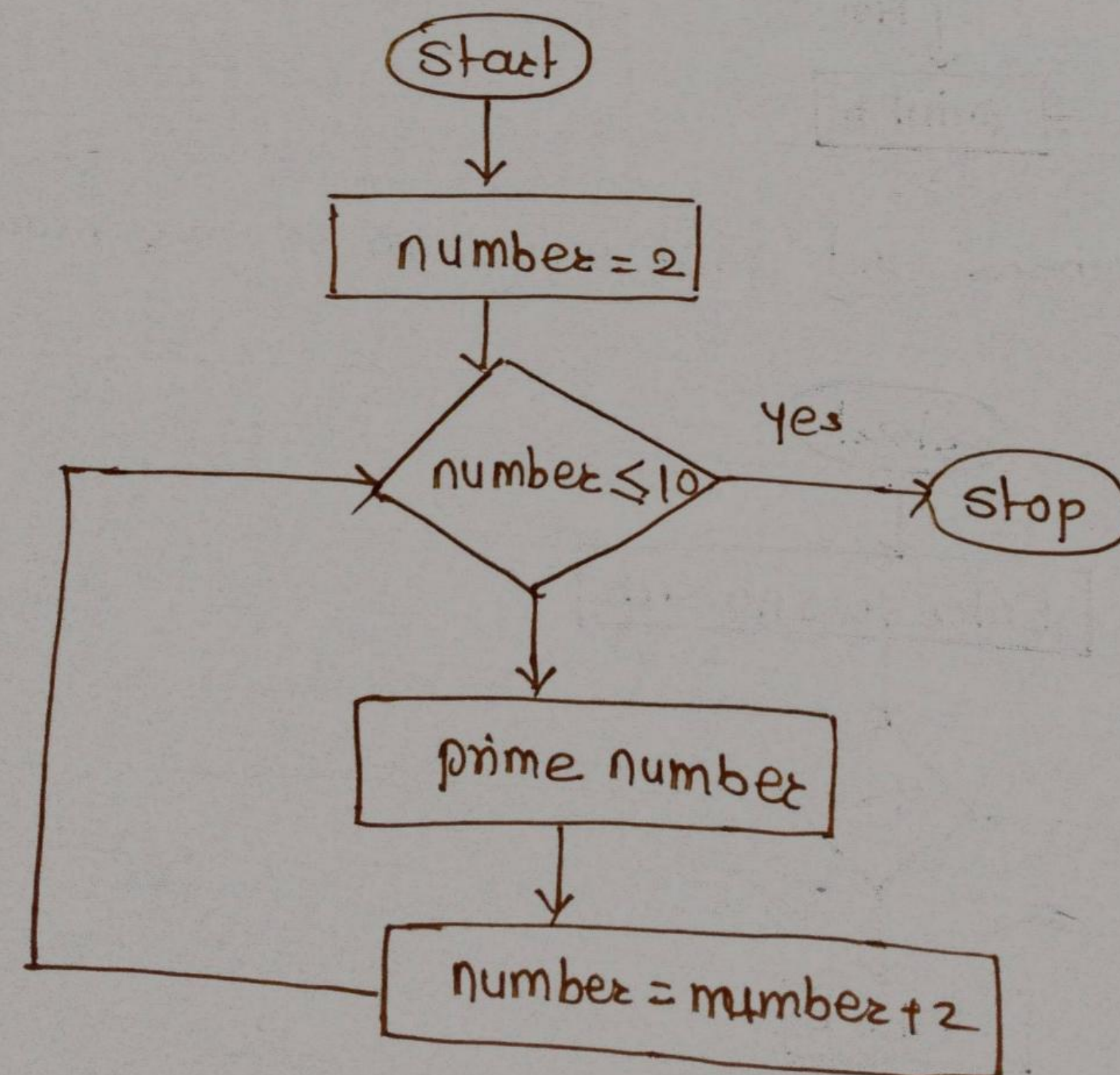
$$1 \text{ inch} = 0.0254 \text{ m}$$

$$1 \text{ inch} = \frac{1}{39.37} \text{ m}$$

$$\therefore$$



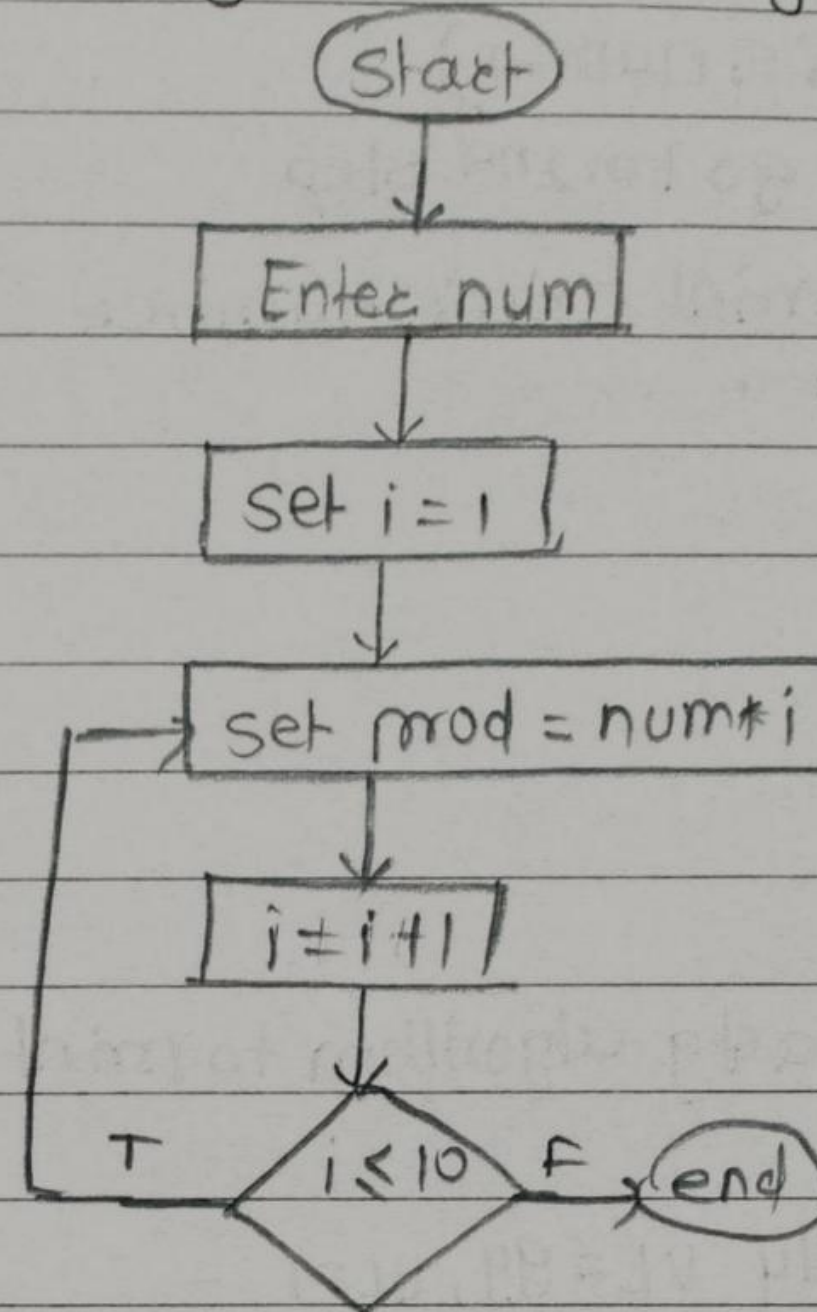
d] Print 2, 4, 6, 8, 10.



Assignment No. 2.

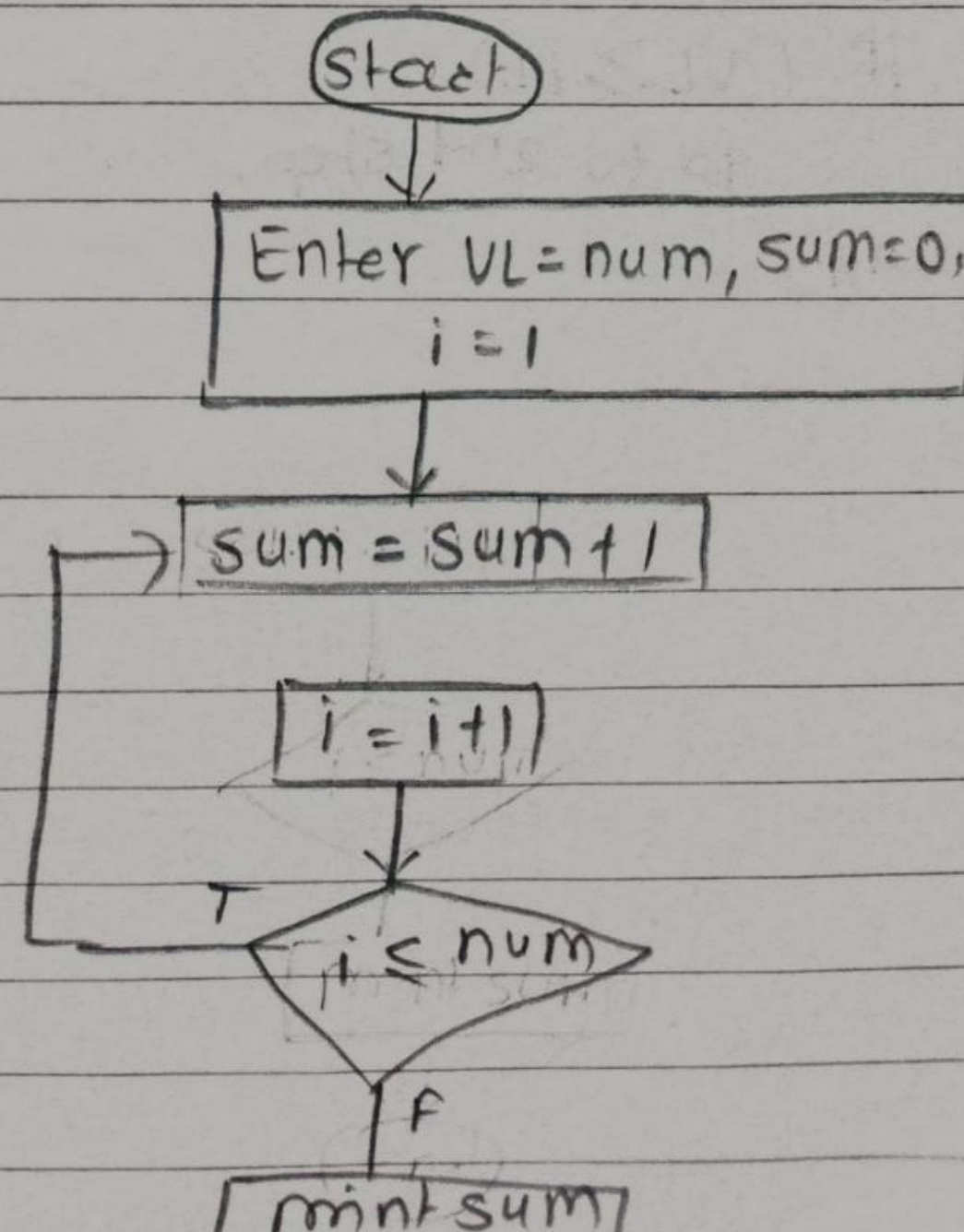
a) Write algorithm that print table of any number, e.g. 7

- ① Initially $num, i=1, mod$.
- ② $prod = num * i$
- ③ print $num prod$.
- ④ $i = i + 1$
- ⑤ if ($i \leq 10$)
go to 2nd step
- ⑥ end.



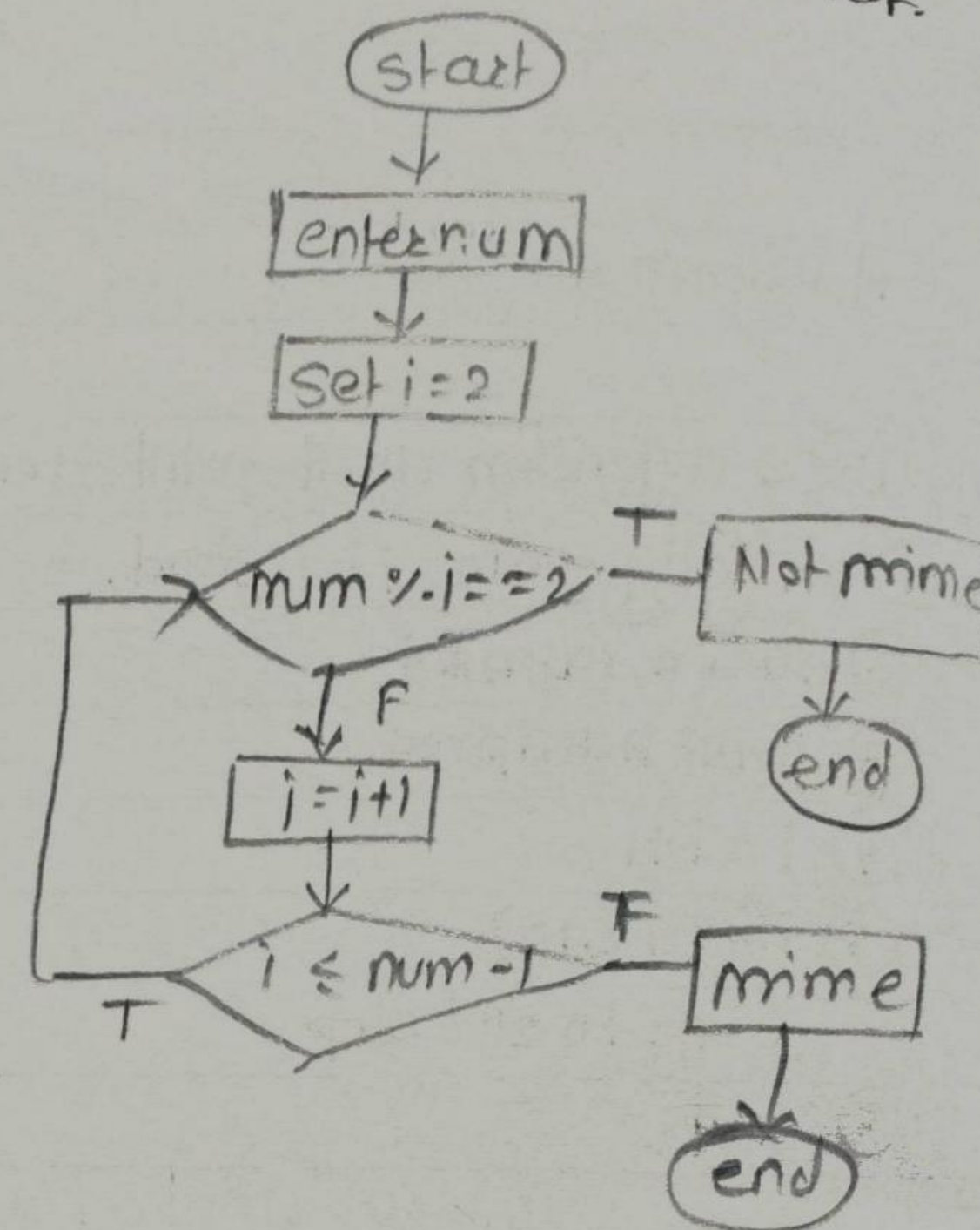
b) Write algorithm that print sum of N numbers.

- ① Initially $VL=num, i=1, sum=0$
- ② $sum = sum + i$
- ③ $i = i + 1$
- ④ if ($i \leq num$)
go to 2nd step
- ⑤ print sum
- ⑥ end.



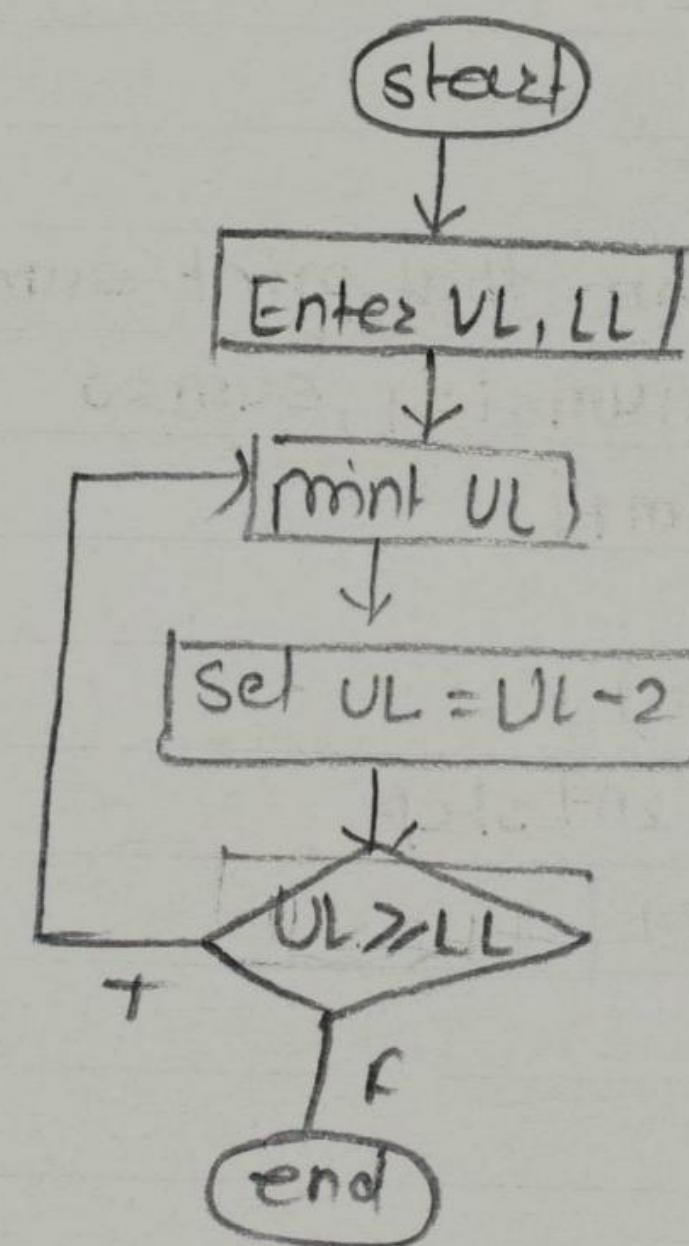
c) Write an algorithm to check the number is prime or not.

- ① Initially $i = 2$, num
- ② IF ($\text{num} \% i == 0$)
not prime
- ③ else
 $i = i + 1$
- ④ IF ($i \leq \text{num} - 1$)
go to 2nd step
- ⑤ else print prime number
- ⑥ end.



d) Write an algorithm to print all odd numbers backward from 99 to 1.

- ① Initially $UL = 99$, $LL = 1$
- ② print UL
- ③ $UL = UL - 2$
- ④ IF ($UL \geq LL$)
go to 2nd step.
- ⑤ end.



Assignment 3

a) Check if a year is leap year or not.

- ① Initially year
- ② if (year % 4 == 0)
 print leap year
- ③ else
 print not leap year
- ④ end.

b) Write algorithm to print all odd numbers backward from 99 to 1.

- ① Initially UL = 99, LL = 1
- ② print UL
- ③ UL = UL - 2
- ④ if (UL > LL)
 go to step 2
- ⑤ end.

c) Java program to calculate distance betⁿ two points.

- ① Initially pt1 = x, pt2 = y
- ② Distance = y - x
- ③ print distance
- ④ end.

d) Write algorithm to print sum of even and odd digits, considering 10 numbers are taken from user.

① Initially, VL, i.

② IF ($i \% 2 == 0$)

sum = sum + i

i++;

③ else

sum1 = sum + i

④ IF ($i < \text{num}$)

go to 2nd step

⑤ end.

e) Print 1st x terms of the series $3N + 2$ which are not multiples of 4

① Initially N

② Int $X = 3N + 2$

if ($X \% 4 \neq 0$)

print X

③ else

go to 2nd step.

end.

d) Write an algorithm to find compound interest, provided principal, time and ROI are taken by user,

- ① Initially $p, x, n, t,$
- ② $A = p \left(1 + \frac{x}{n} \right)^{nt}$
- ③ $\text{min} A$
- ④ end.