

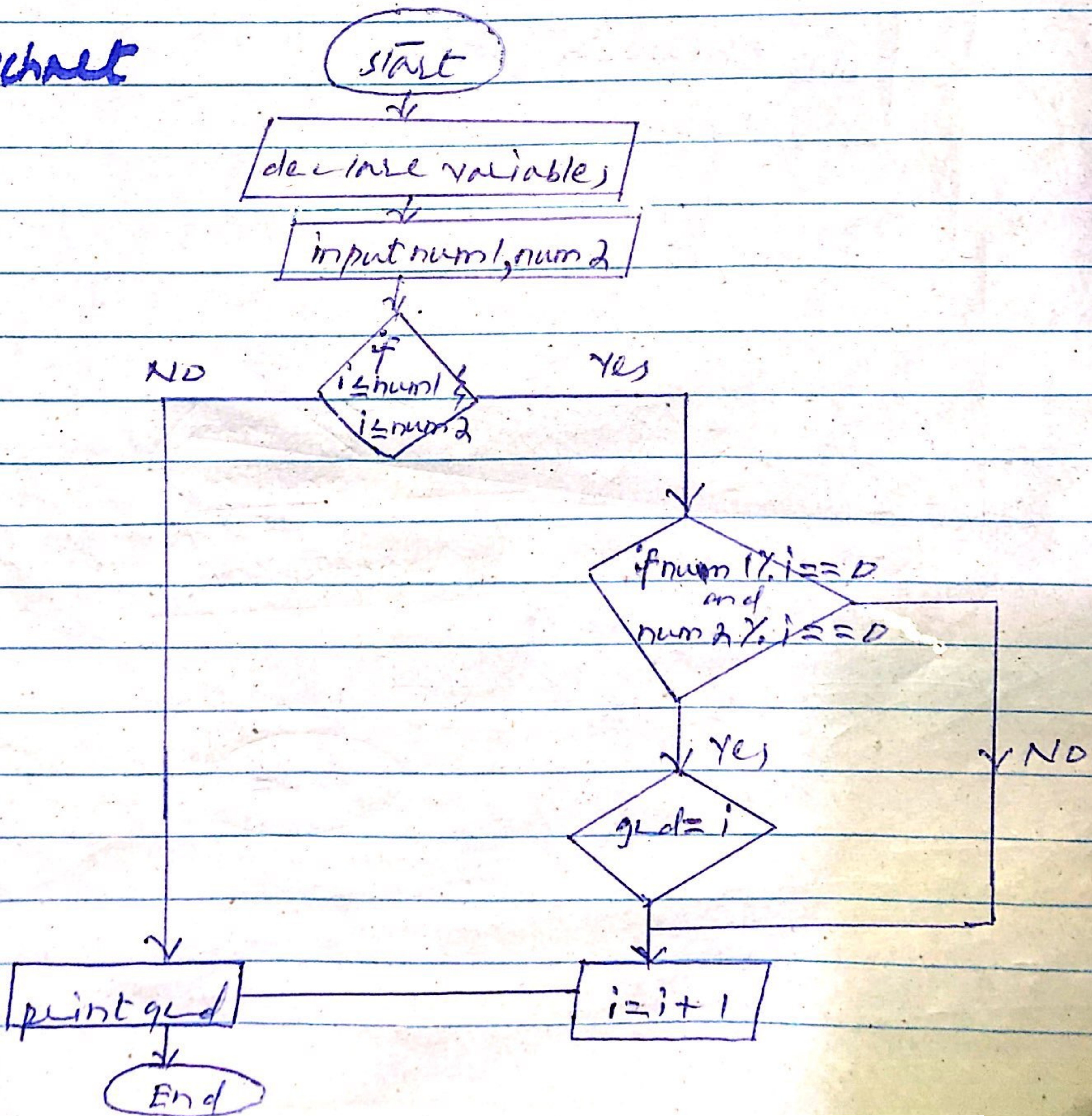
23k-3032 (Shahidunain)

Task: 1 (a)

GCD

- 1- start
- 2- declare num1, num2,  $i=1$ ,  $gcd=1$  as integers.
- 3- Enter/read two numbers.
- 4- repeat until  $i \leq \text{num1}$  and  $i \leq \text{num2}$   
if  $\text{num1} \% i == 0$  and  $\text{num2} \% i == 0$   
 $gcd = i$
- 5- print gcd
- 6- stop

flowchart





## Task 1(a)

(b)

1- Start

2- declare variable,

3- Enter read number, A, B, C

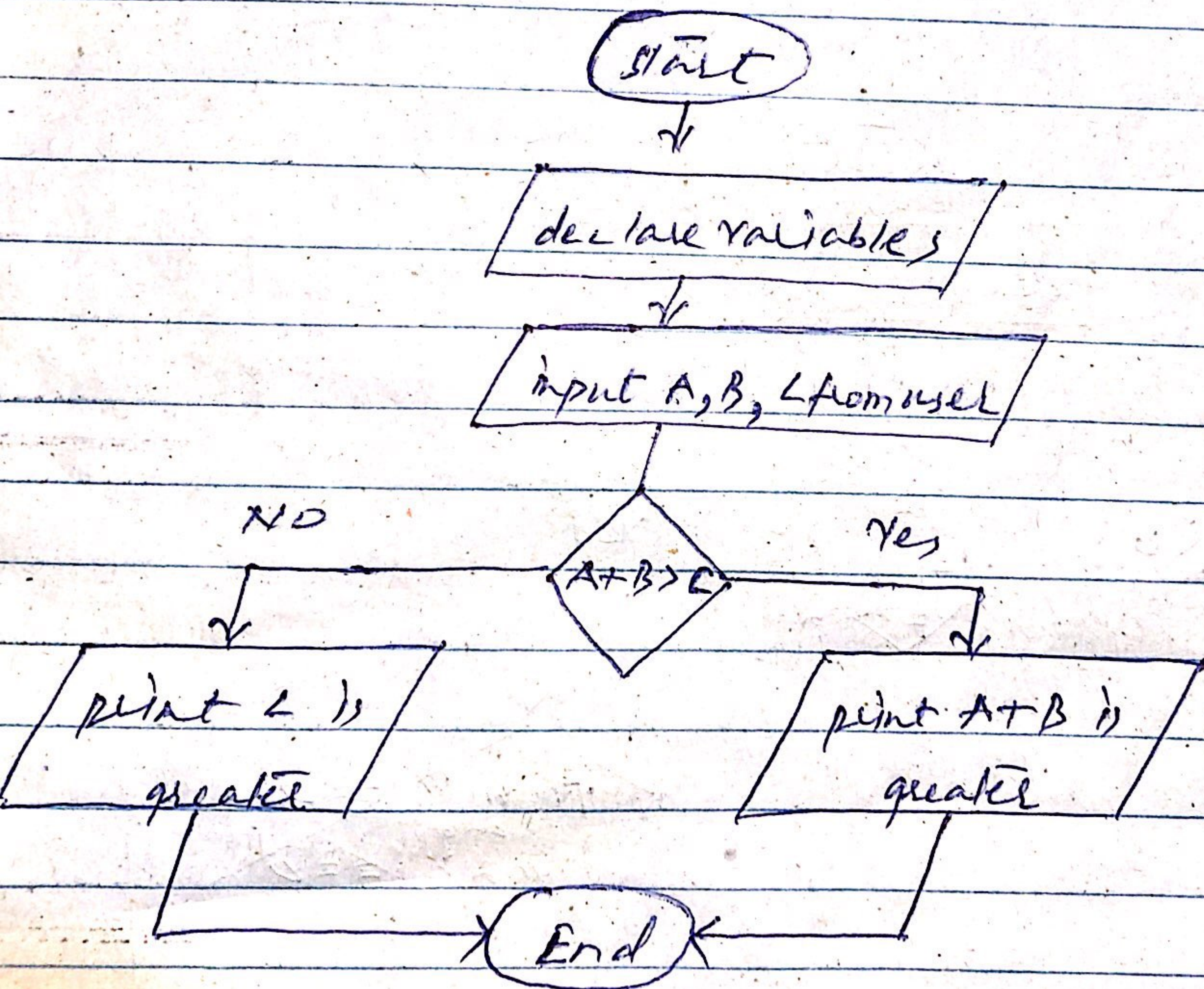
4- if  $(A + B > C)$

{ print("%d + %d is greater", A, B); }

else {

print("%d is greater", C); }

5- End





(4)

1- start

2- declare variables,  $a, b, c, d, e, f, g, h, i, j$

3- input 10 numbers from user

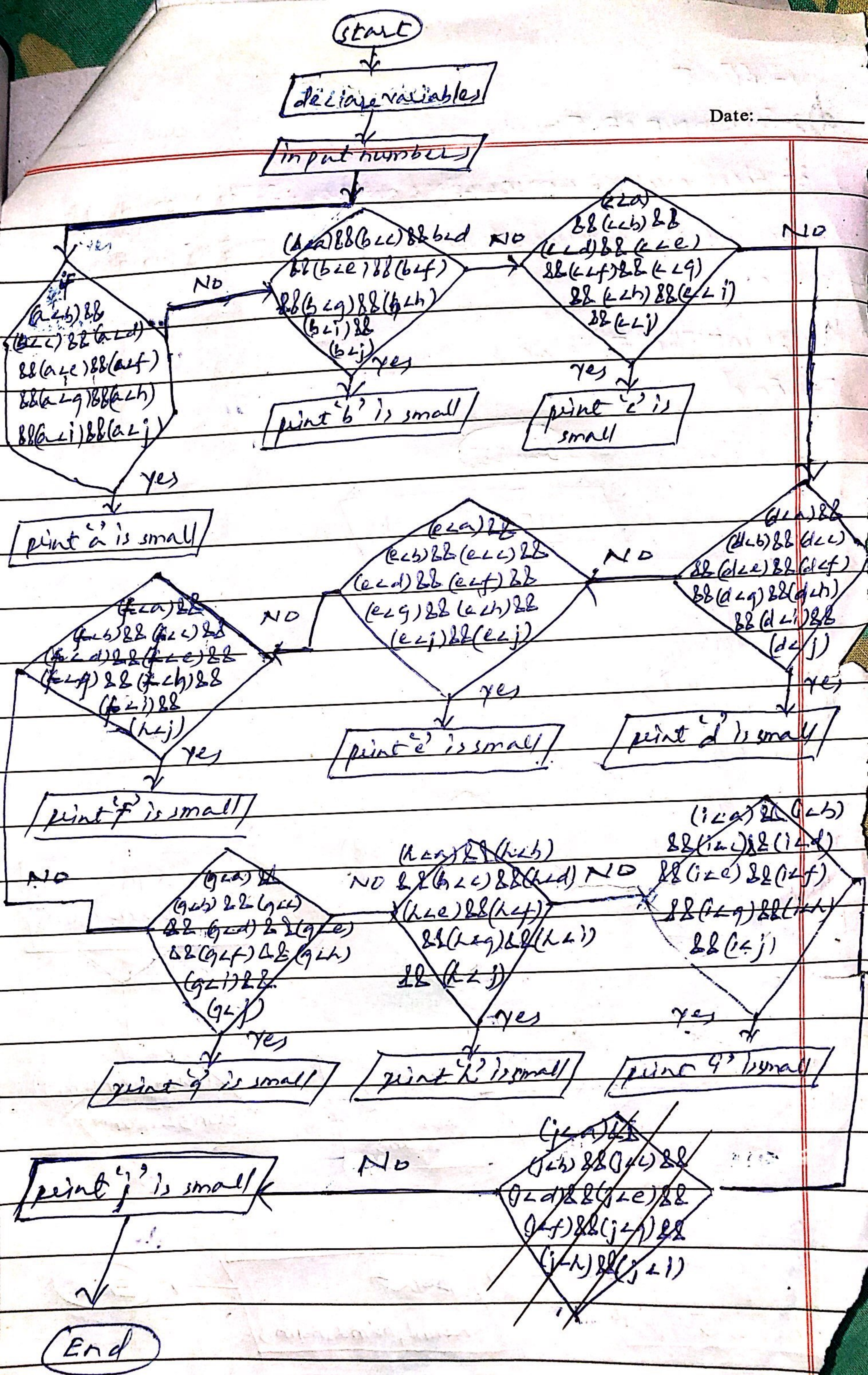
4-  $\text{if}(a < b \ \& \ a < c \ \& \ a < d \ \& \ a < e \ \& \ a < f \ \& \ a < g \ \& \ a < h \ \& \ a < i \ \& \ a < j)$  { print f("It's smallest",  $a$ ) }

else repeat step 4 for  $b, c, d, e, f, g, h, i, j$

5- print smallest number

6- stop







d)

1- let  $pos = 1$  and  $i = pos + 1$  and  $n = \text{length of numbers}$   
and  $largest = 0$

2- if  $num[pos] < num[i]$  then  $largest = i$

3-  $i = i + 1$

4- Repeat from '2' until  $i > n$

5- let  $a = num[pos]$

6-  $num[pos] = num[largest]$

7-  $num[largest] = a$

8-  $pos = pos + 1$  and then  $i = pos + 1$

9- Repeat from '2' until  $pos > n$ .



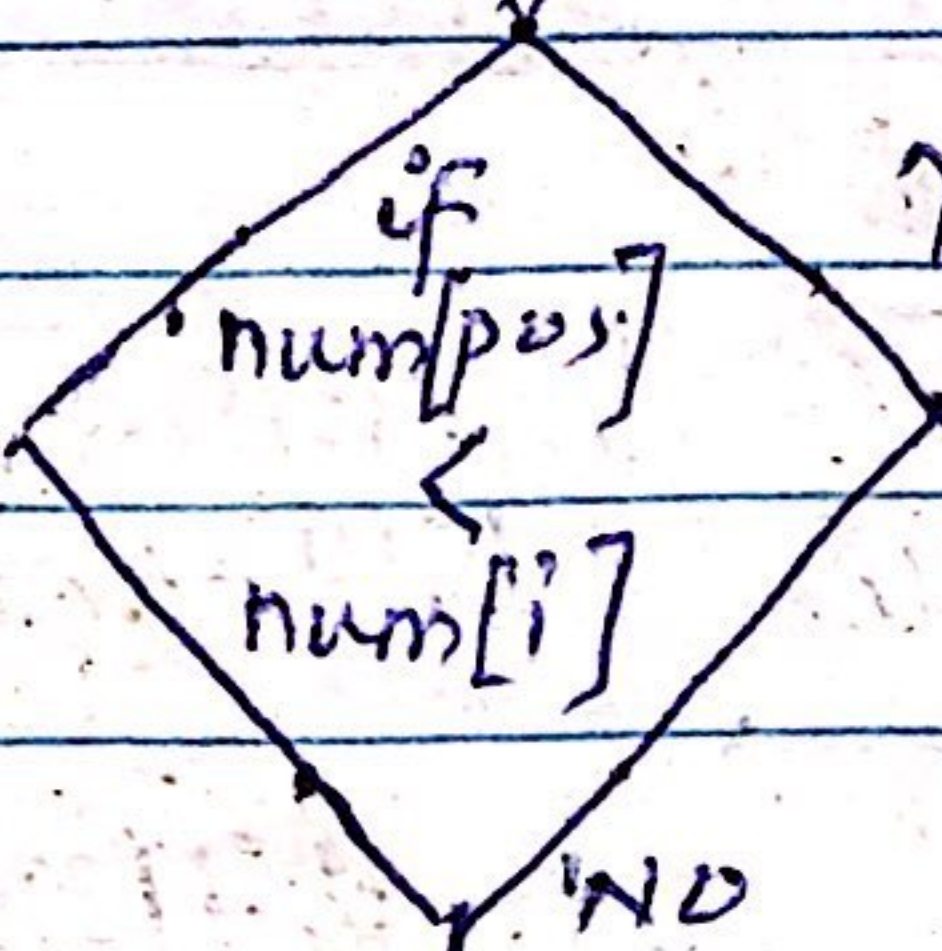
d)

Start

$pos = 1$  ;  $n = \text{length numbers}$

$i = pos + 1$  ;  $largest = pos$

(A)



yes

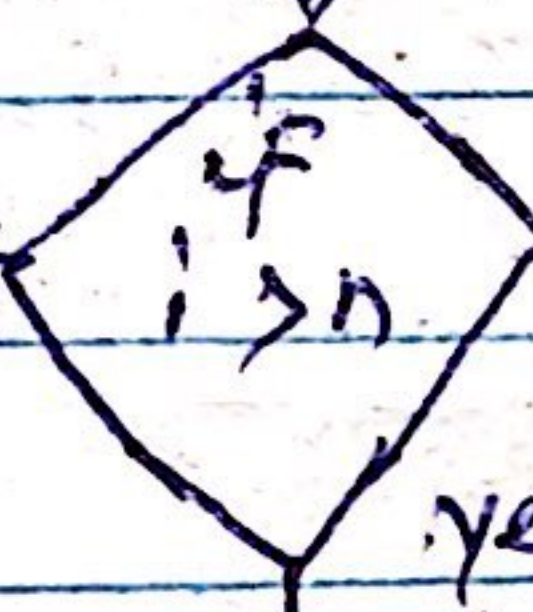
$largest = i$

NO

$i++$

NO

(A)



yes

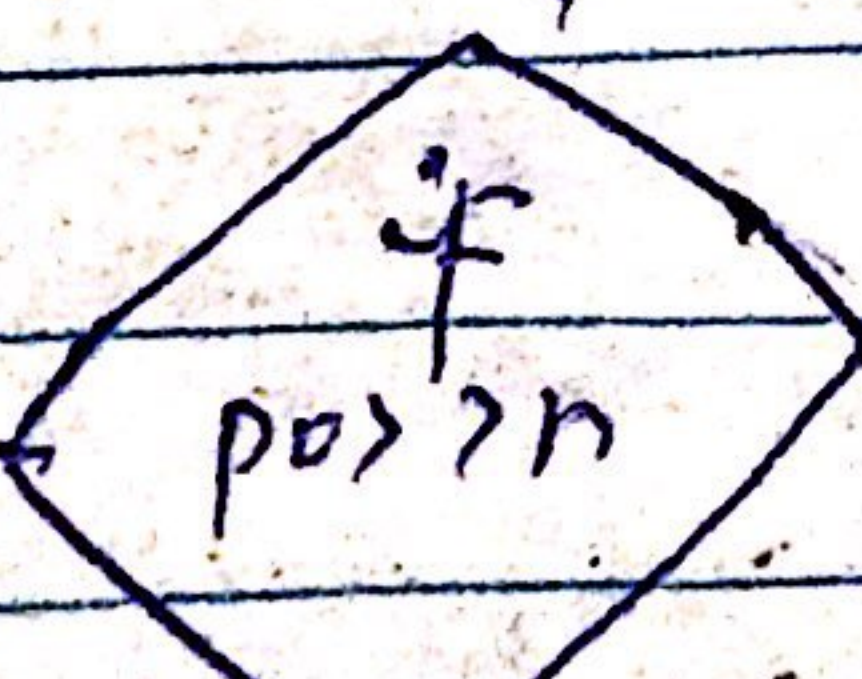
$a = num[pos]$

$num[pos] = num[largest]$

$num[largest] = a$

$pos++$

$i = pos + 1$



yes

End

NO

(A)



e) 1- start

2- declare variable

3- input number of numbers i.e.,  $n$

4- for (int  $i = 0$ ;  $i < n$ ,  $i++$ )

{ if ( $i \% 2 == 0$ )

{ print  $i$  }

}

5- stop

