

Assignment No. -1

- 1) Start
Take the input from the user as num
if $(\text{num} \% 2 == 0)$
then print Even Number
else
print Odd Number
End.
- 2) Start
Take the input from the user as n
Initialize variable: result = 1
for $(i = 1 ; i \leq n ; i++)$
 result = result * i
Print result
End
- 3) Start
Take the input from the user as num
call myfact (num)
Print result
End

myfact (n)
if $(\text{num} == 0)$
then return 1
else
 result = num * myfact (num - 1)

4) Start
Input a, b
 $a = a + b$
 $b = a - b$
 $a = a - b$
Print swap numbers
End

5) Start
Input the number as num
If (num > 0)
then print number is positive
else if (num < 0)
then print number is negative
else
print number is equal to zero
End

6) Start
Input the year
if (year % 400 == 0)
then print Leap Year
else if (year % 100 == 0)
then print not a leap year
else if (year % 4 == 0)
then print Leap Year
else
print not a leap year

7) start
 print (1)
 print (2)
 print (3)
 print (4)
 print (5)
 print (6)
 print (7)
 print (8)
 print (9)
 print (10)
 End.

8) Start
 Input the number as N
 call printDigit (N)
 int arr [MAX]
 int i = 0, j, r

while (N != 0)

{

r = N % 10 ;

arr [i] = r ;

i++ ;

N = N / 10 ;

}

for (j = i-1 ; j > -1 ; j--)

print the digits

stop

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9> Start
Input the number as num
int i ;
for (i=1 ; i <= num ; i++)
{
    if (num % i == 0)
    then print i
}
End

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10> Start
Input the number as num
int sum = 0 , div 1 ;

while (num > 0)
{
    div 1 = num % 10 ;
    sum = sum + div 1 ;
    num = num / 10 ;
}
print sum ;
End

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11> Start
Input a, b, c

if (a < b && a < c)
then print a is smallest
else if (b < c)
then print b is smallest
else
print c is smallest
End

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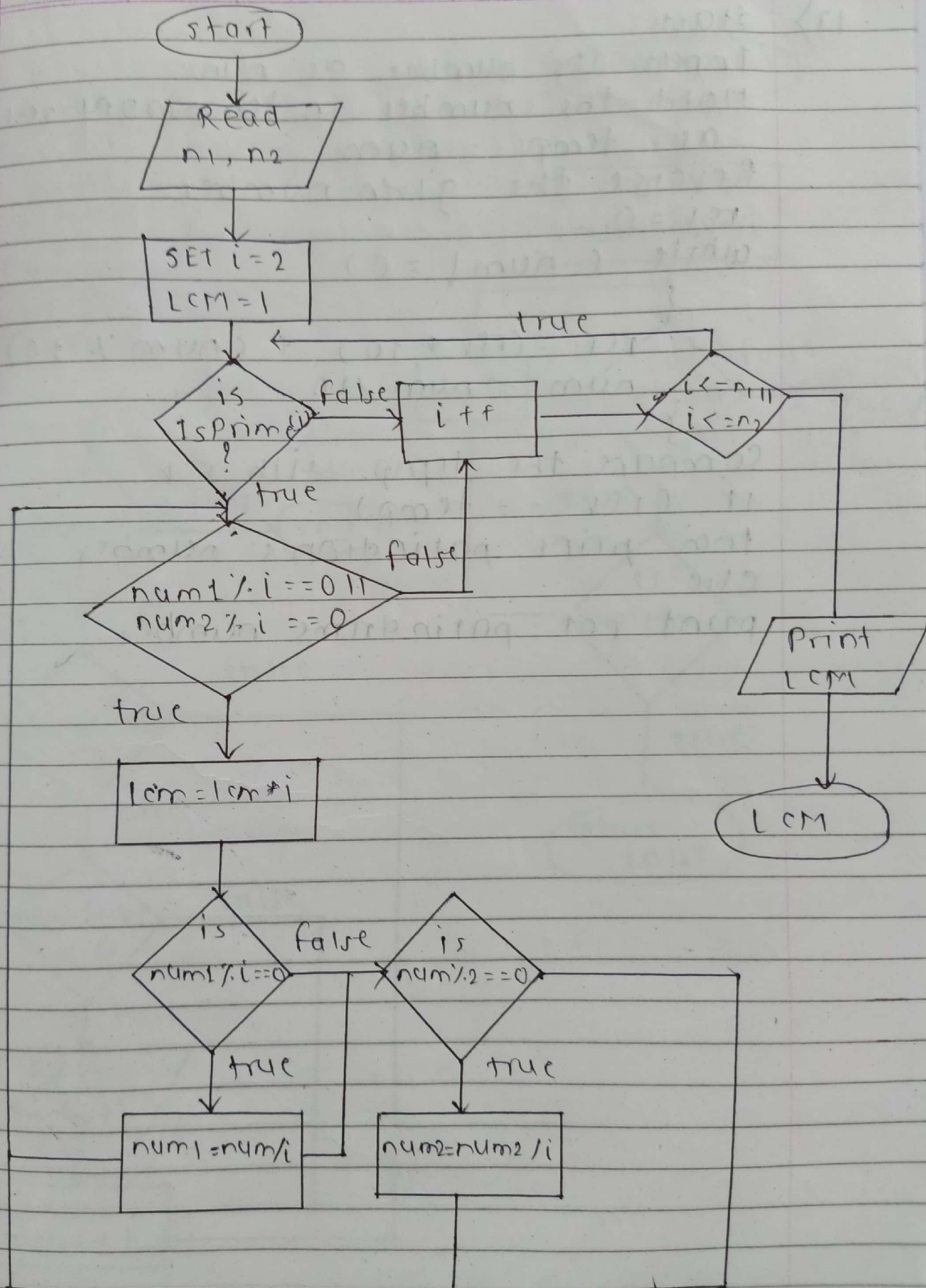
12> start
Input a, b
call add (a, b)
while (a > 0), to handle positive a
{
 b++
 a--
}
while (a < 0), to handle negative a
{
 b--
 a++
}
return b
Print b
End

13> start
Input the number as num.
Declare and initialize rev with 0.
while (num != 0)
{
 rev = (rev * 10) + (num % 10)
 num = (num / 10)
}
Print the reverse number
End.

14) Start
 Take the input as num1 and num2
 Declare another variable as GCD
 for $i=1; i \leq \text{num1} \&\& i \leq \text{num2}; i++$
 {
 if $(\text{num1} \% i == 0 \&\& \text{num2} \% i == 0)$
 GCD = i
 }
 Then print GCD
 stop

15) Start
 Input the numbers num1 and num2
 Take another variable as LCM
 $\text{LCM} = (\text{num1} > \text{num2}) ? \text{num1} : \text{num2}$
 while (1)
 {
 if $(\text{LCM} \% \text{num1} == 0 \&\& \text{LCM} \% \text{num2} == 0)$
 {
 print LCM
 break
 }
 ++ LCM
 }
 End

16/



17)

start

Input the number as num

Hold the number in temporary variable
as temp = num

Reverse the given number

rev = 0

while (num != 0)

{

rev = (rev * 10) + (num % 10)

num = num / 10

}

Compare the temp with rev

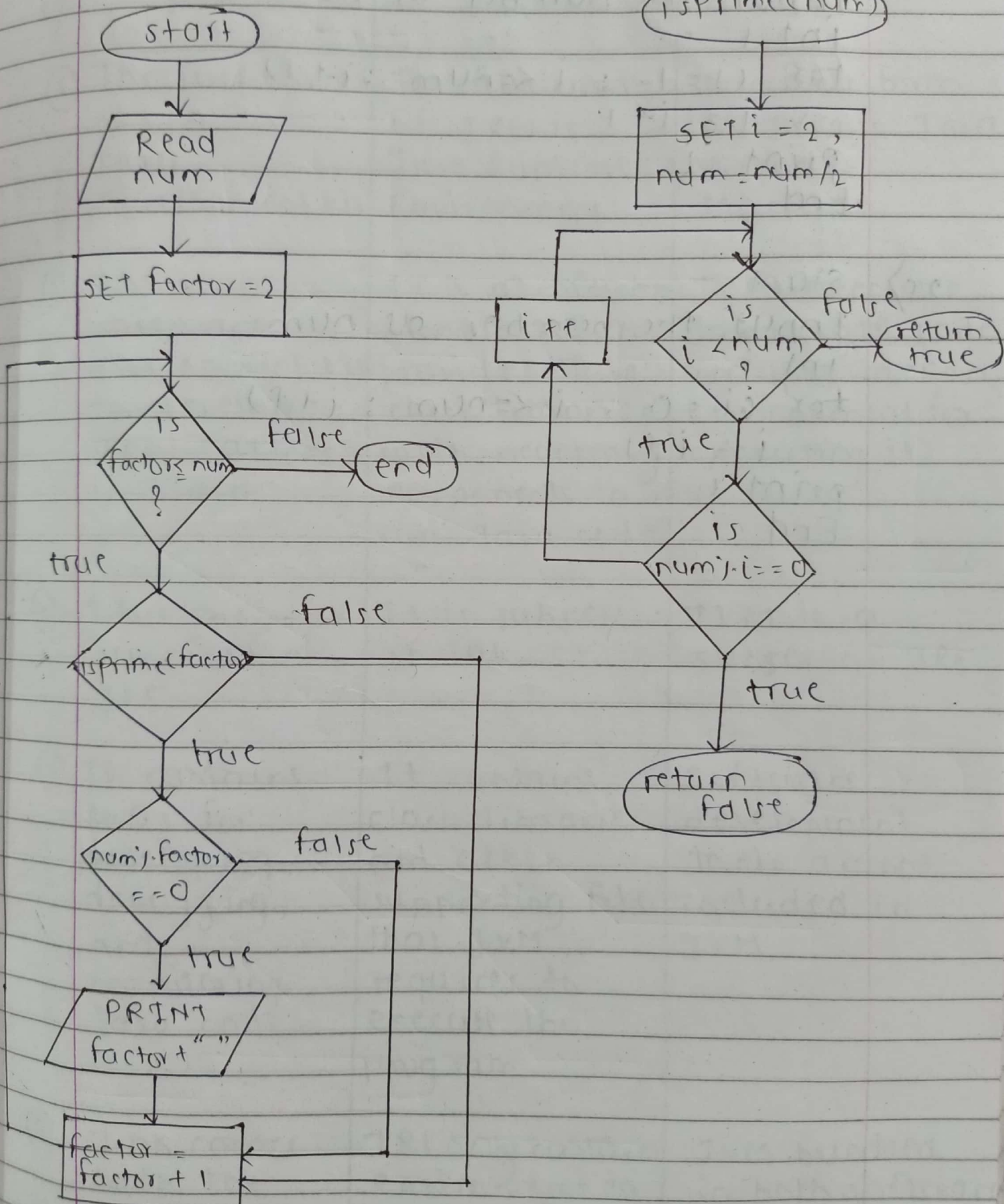
if (rev == temp)

then print palindrome number

else

print not palindrome number.

18)



19) Start
Input the number as num
int i
for (i = 1 ; i <= num ; i++)
 i = i + 1
print i
End

20) Start
Input the number as num
int i
for (i = 0 ; i <= num ; i++)
 i = i + 1
print i
End