Q:2

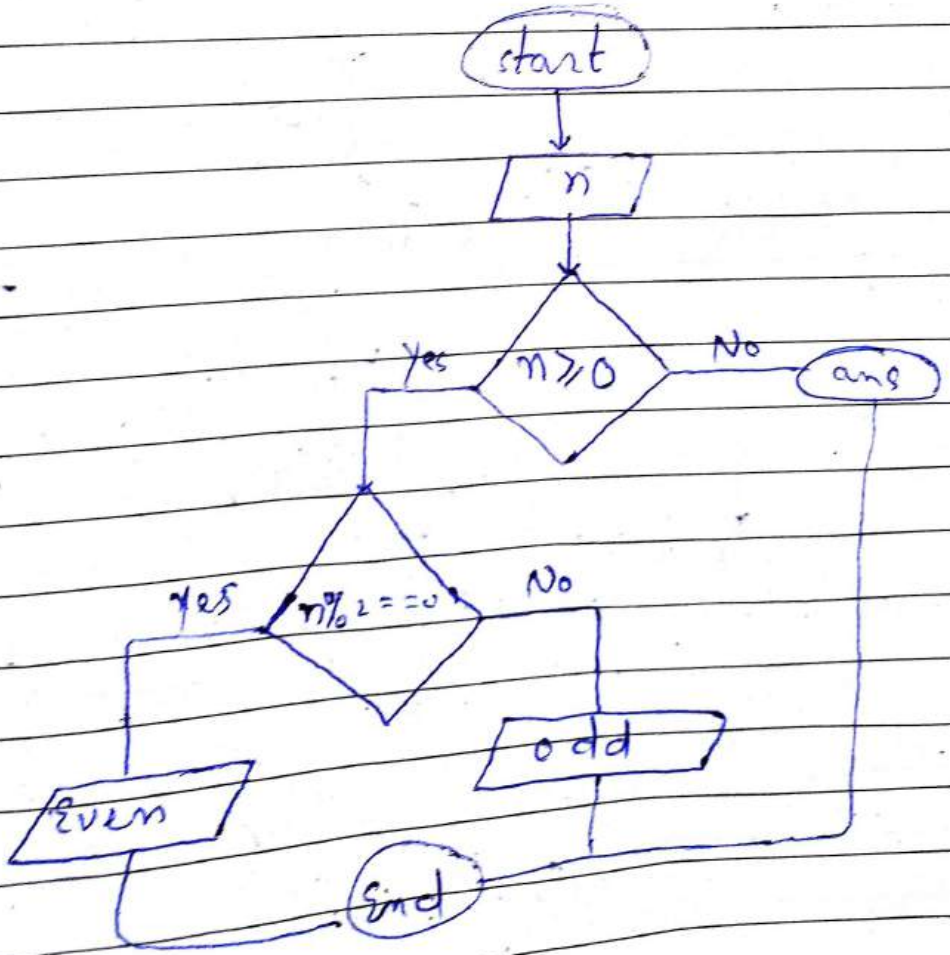
Date:

EVEN OR ODD

IPO

Input	Process	output
a number	• start • Enter a number • If n>=0 True: Solve further False: Invalid Else if num % 2 == 0 Display Even Else Display odd.	Even or odd.

FLOWCHART

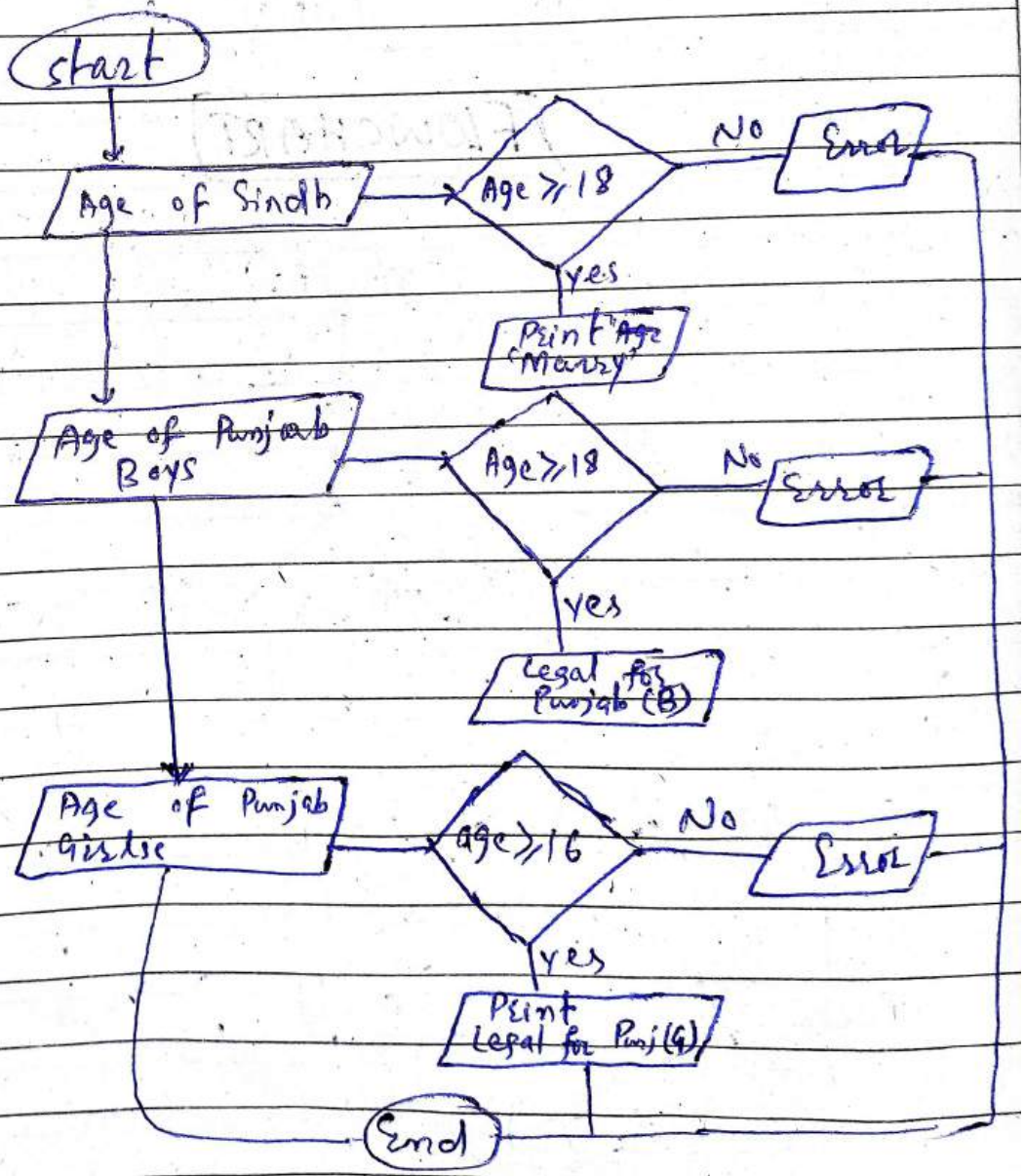


Pseudo

1. start
2. check n >, 0
   then
3. IF n % 2 == 0
   print 'Even'
   Else
   "odd".
4. End.

Q:03. Legal Age of marriage in Pakistan:

FLOWCHART



Date:

IPO

Input	output	Process
• Age of Sindh • Age of Boys of Punjab • Age of Girls of punjab	Legal or Illegal	• start. • If province == Sindh If age >= 18 Print 'legal' Else 'Error' • Province = Punjab If age >= 16 Print "legal for punj girls" • Province == Punjab If age >= 18 Print "legal for Boys & girls of Punjab" Else 'Error' • End.

Pseudo

1. start
2. check condition
   Prov == Sindh
   if age >= 16
   Print Legal
   Else "Error"
3. Province == Punjab.
   IF age >= 16
   Print "legal for Punjab girls"
   elseIf age >= 18
   . Print "legal for Boys & girls of Punjab"
   . Else Error
4. End.

Date:

Q:4

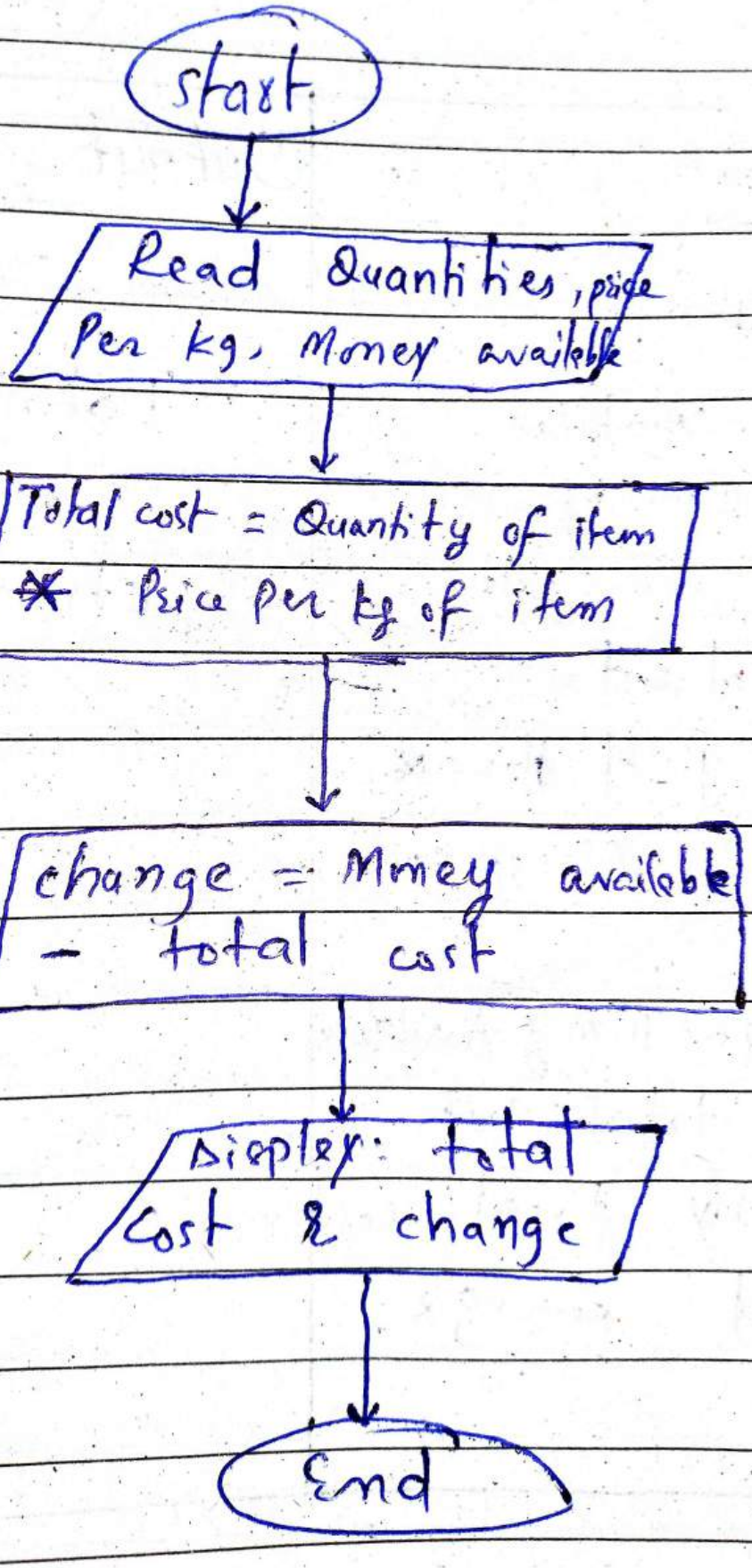
IPO

Input	Process	Output
• Quantities of items, Price per kg of items Money available	• start • Read Quantities Price per kg, Money available • total cost = Quantity of items * Price per kg of each item. • change = Money Available − total cost • Display total cost and change End	Total cost and change.

Pseudo

1. start
2. Read Quantities of items
3. per kg, Money available
4. Total cost = Quantity of item * price per kg of each item
5. Change = Money available − total cost.
6. Display total cost & change
7. End.

FLOWCHART


start
Read Quantities, price Per kg, Money available
Total cost = Quantity of item * Price per kg of item
change = Money available - total cost
Display: total Cost & change
End

Q:6

Date:

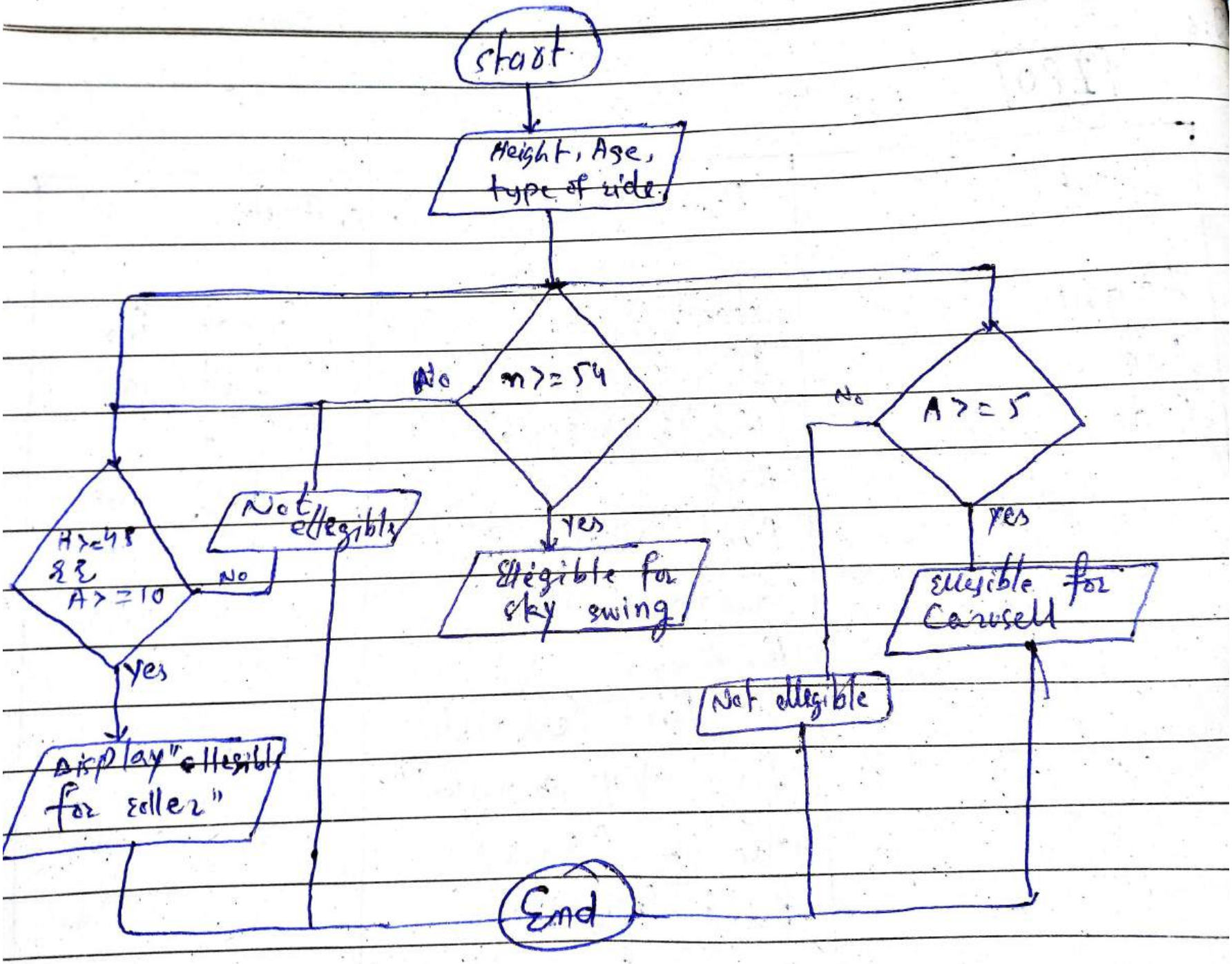
IPO

Input	Process	Output
Height, Age, Ride	start If (H >= 48 && A >= 10) then Print "elligible for dragon Coaster" then Print 'elligible' for 'sky swings" else if (A >= 5) Print "eligible for Carousel" Else Print 'not eligible'. End	"meet the Criteria" or "do not meet the criteria"

Pseudo

1. start
2. Input: Height, Age, ride
3. Enter type of ride
4. If (H >= 48 && A >= 10)
   Print "Eligible for dragon roller coaster"
   Else if (H >= 54)
   Print Eligible for "Sky swing"
   Else If (A >= 5)
   "Print Eligible for Carousel"
5. Else "Not Illegible"
6. End

Date:

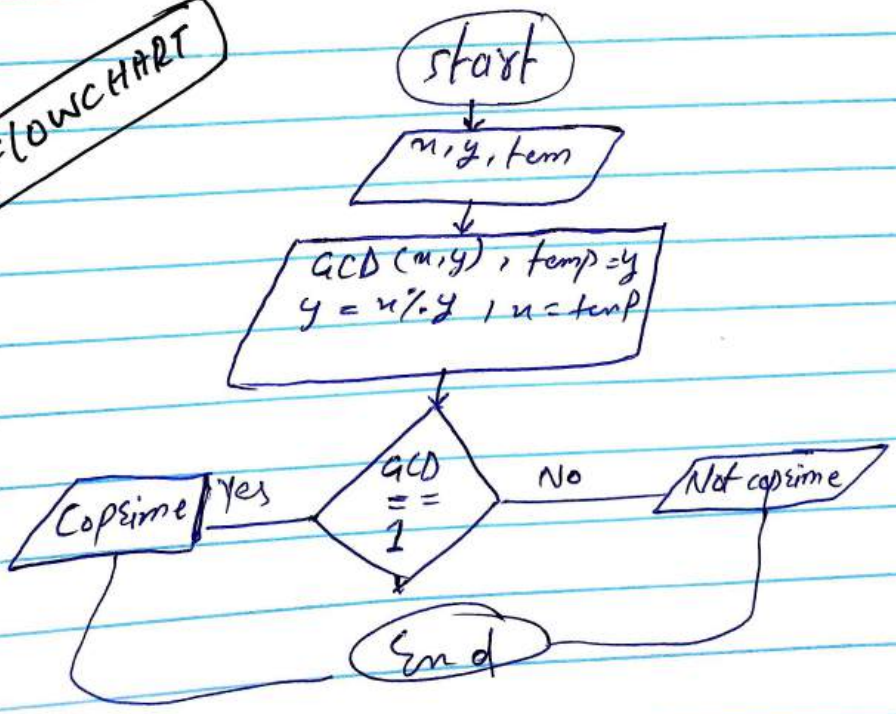

start
Height, Age, type of ride
h >= 54
No
yes
Not eligible
Eligible for sky swing
A >= 5
No
yes
Eligible for Carousell
A >= 45 && A >= 10
No
yes
Display "eligible for Roller"
Not eligible
End

Q:11

Pseudo

```
1. start
2. GCD (x, y)
   while y ≠ 0
   temp = y
   y = x % y
   x = temp
   End while
   check function is coprime (a, b)
   gcd = GCD(a, b)
   IF (gcd = 1)
   Print ("the number is coprime")
   Else
       Print ("Not coprime")
   End.
```

FLOWCHART



Date:

IPO

• Input	• Process	• Output
x, y, temp.	start Read x,y, temp. temp = y y = x % y x = temp If GCD == 1 Print 'Coprime' Else Print 'Not' End	'Co-prime' or 'Not'

Q:8

Date:

Sum of digits

Pseudo

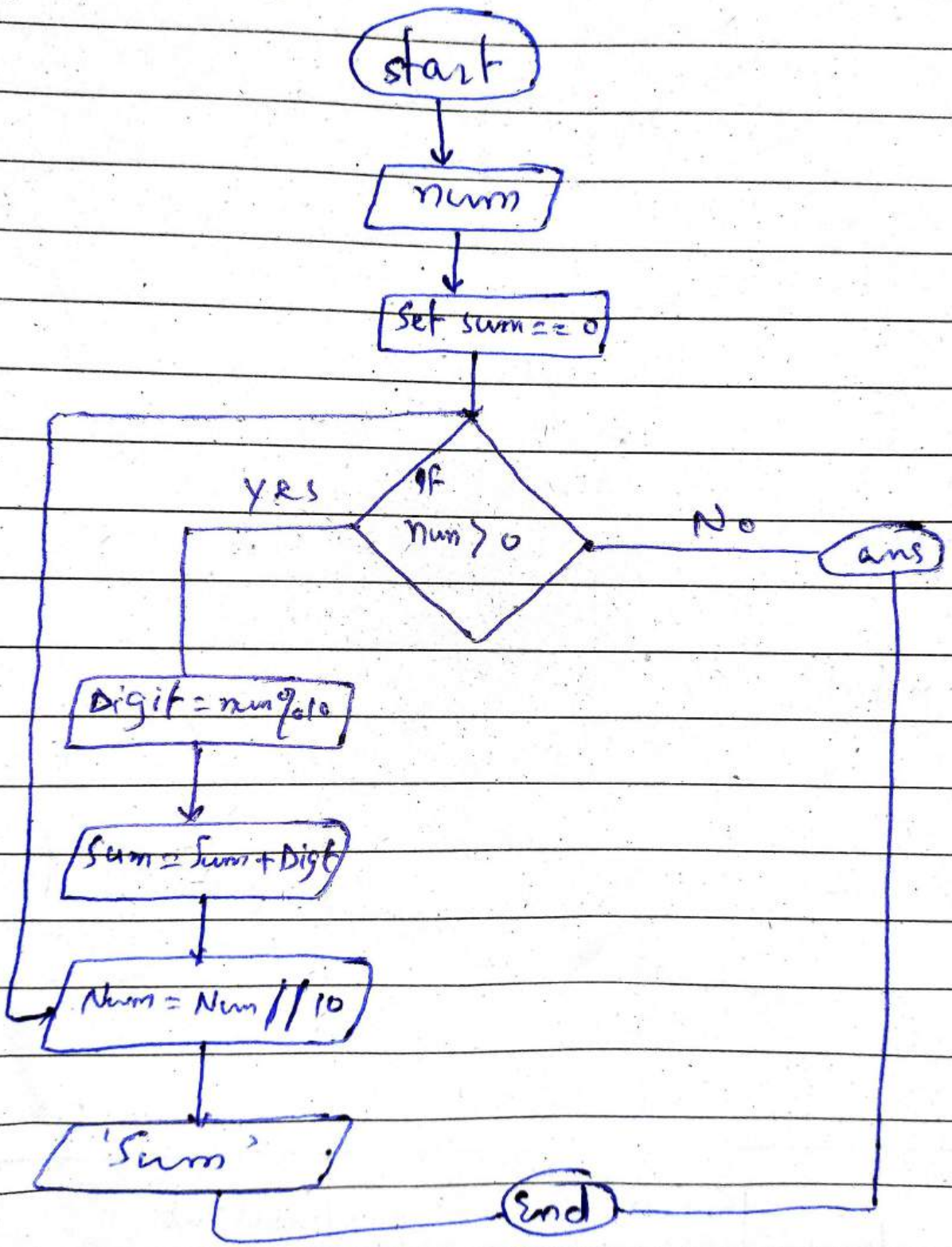
1. start
2. Read num
3. Set Sum = 0
4. If num > 0
   Digit = num % 10
   Sum = Sum + Digit
   Num = Num // 10
5. If num > 0 (Loopback)
   Else
   output Sum
6. End.

IPO

Input	Process	Output
num	start Read num Set sum = 0 If num > 0 Digit = num % 10 Sum = Sum + Digit num = num // 10 If num > 0 (Loopback) Else out put Sum End	Display "Value of Sum" or 'Error'

Date:

FLOWCHART



Date:

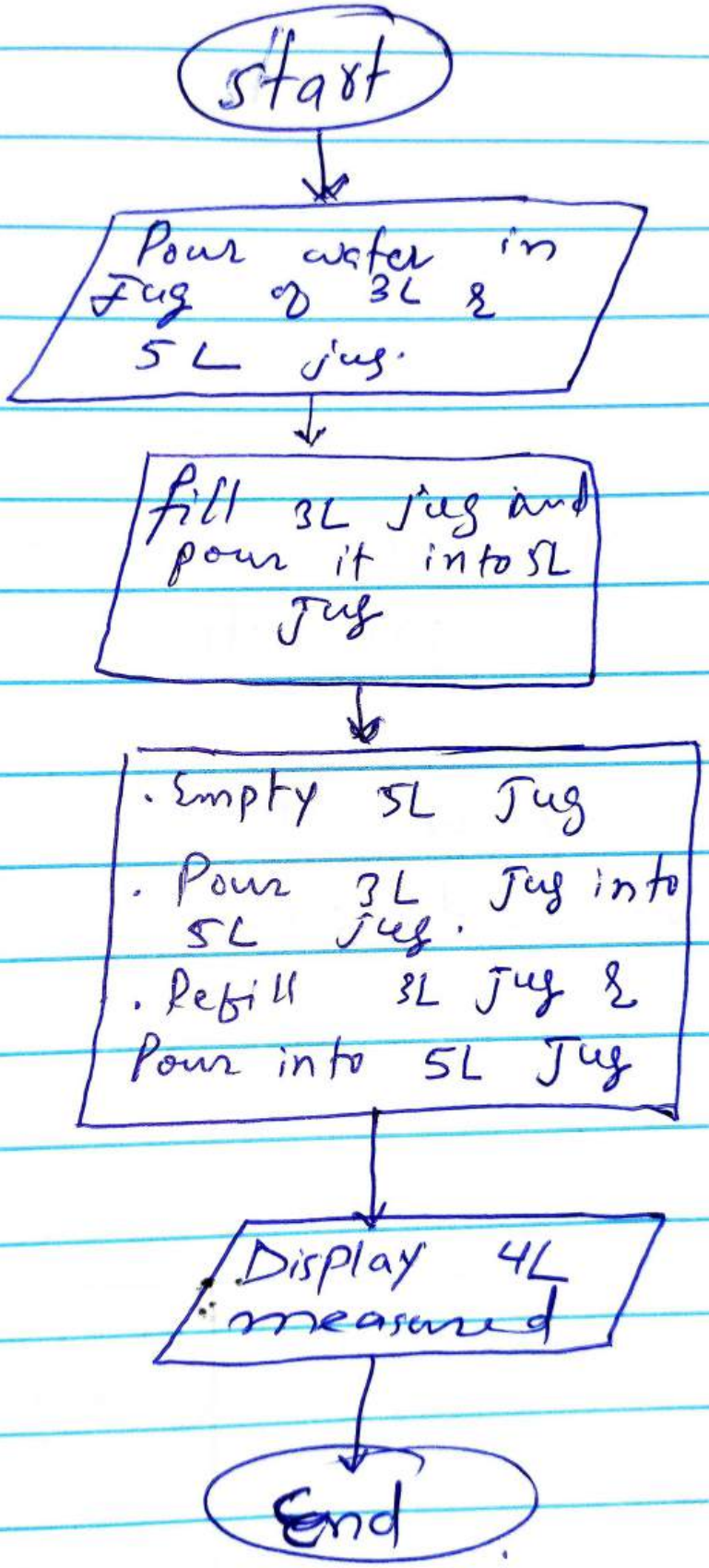
Q:12

Pseudo

1. start
2. Pour water in jug of 5L and 3L
3. fill the 3L jug and pour 3L water into 5L jug.
4. Refall the 3L jug and pure water into 5L jug from 3L jug.
5. Refill 3L jug and pour it into 5L jug.
6. 4L in 5L jug measured now
7. End

Input	Process	Output
Pour water in Jug of 3L & 5L	1. start 2. fill 3L jug & pours into 5L jug 3. Refill 3L jug and pour into 5L jug 4. Empty 5L jug into 5L jug. 5. Refill 3L jug and pour into 5L jug 6. End.	Display 4L measure in 5L jug

FLOW CHART


start
Pour water in Jug of 3L & 5L jug.
fill 3L jug and pour it into 5L Jug
. Empty 5L Jug
. Pour 3L Jug into 5L jug.
. Refill 3L Jug & Pour into 5L Jug
Display 4L measured
End

Q:9 Pseudo

Date:

1. start
2. Inp = Current date obj = Current date
3. DOB object = date of birthday

```
If
   DOB obj > current date obj
then
  print "Error"
End If
      years = Current date obj.years - date of birthday
                obj. year.
months = current date obj. month - date of birth obj.month
day = current date obj. days - dob obj. days.

If    day < 0   then
     months = month - 1
     day = day + 1
 End if
If    months < 0  then
     months = month + 12
      year = year - 1
Print  'Y-M-D' as result
If       month = 1      then
         month = 12

      year = year - 1
Else  month = moth - 1
```

Date:

IPO

Input

Today's date,
DOB

Process

1. start
2. Current date obj
   ==
   DOB
3. If
   DOB obj > Current date obj
4. Year = Current date obj.
   month - DOB Obj. month
5. date < 0 then
   month = month - 1
   Else if
   month = month + 12
   Print "y-M-D"
   If else
   month = month + 1
   year = year - 1
   Switch.
   - Case: (1, 3, 5, 7, 8, 10, 12)
     return 31
   - Case: (4, 6, 9, 11:)
     return 30
   - Case: 28

Output

DOB in days, months && years.

Date:

Q:13 N-M size.

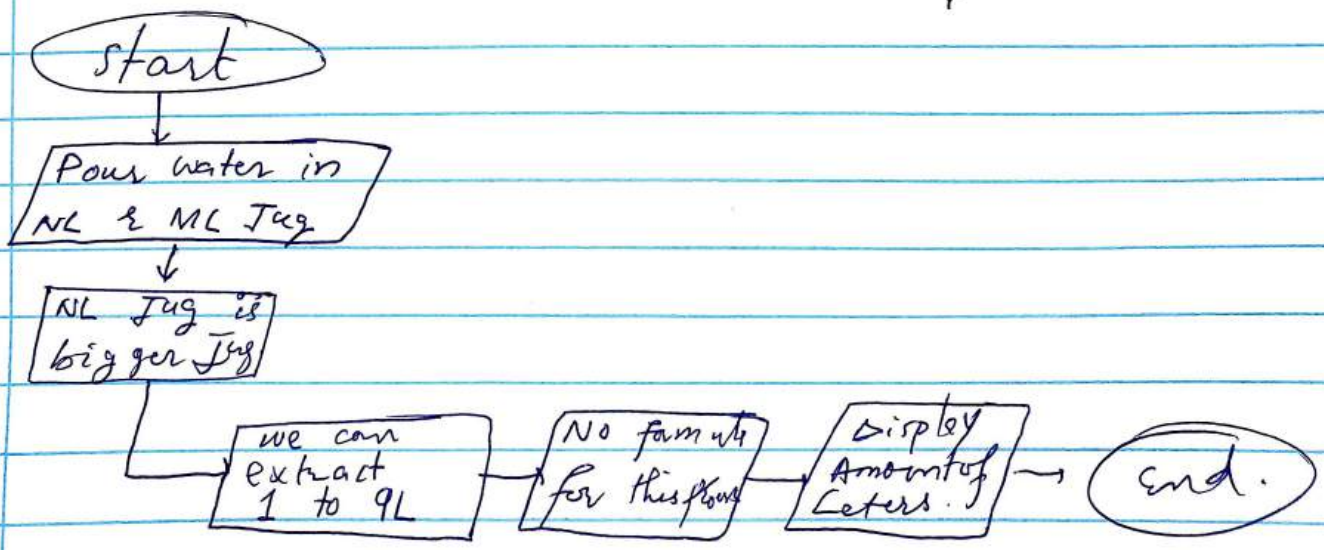
Pseudo

1. Start
2. Pours water into any ML and NL where NL is the bigger Litre jug
3. We can extract any amount of water less than or equal to bigger jug.
4. There are no any for this
5. End.

IPO

Input	Process	Output
Pour ML & NL water in jug where NL is good bigger jug	we can extract any amount less than equal to Jug ~~No Jug for~~	Display amount wh is less the equal to N be measu

FLOWCHART



Q: 5

Date:

Pseudo

1. start
2. Read crop,
   Moisture,
   Rainfall
3. If
   Crop == "wheat && Moisture < 30 && ! rain")
   Crop == "Rice" && Moisture < 25 && ! rain)
   Crop == "Corn" && Moisture < 40)
4. Display Irritation.
5. End.

Input	Process	Output
Crop Moisture Rainfall Set Rain = Rainfall == 1	start (crop == 'wheat' && Moisture < 30 && ! rain) Crop = 'Rice' && Moisture < 25 && rain Crop == "Corn" && Moisture < 40 End.	Irrigation Investigate.

Switch month.

Case (1, 3, 5, 7, 8, 10, 12 :)

Return 31

Case (4, 6, 9, 11 :)

Return 30

Case : (2)

Return 28

Q: 10

Date:

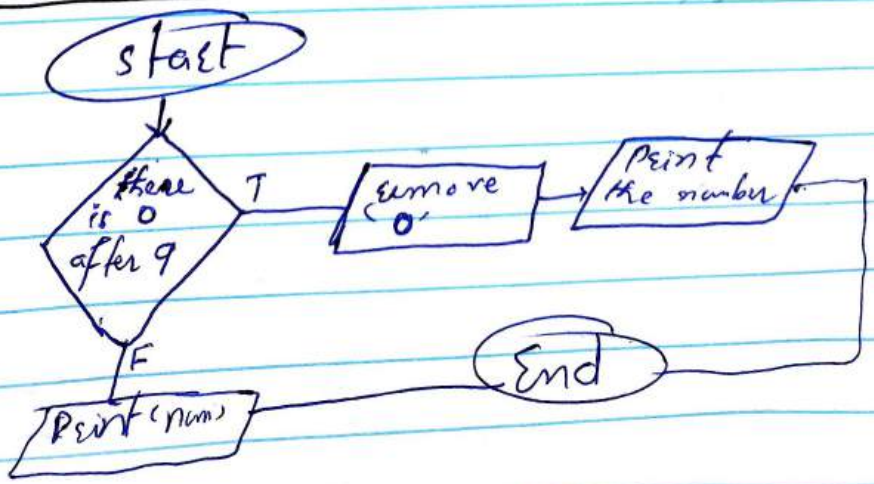
Pseudo

1. start
2. Enter some numbers
3. If a number is 9 & 0 after it then remove the 0 after 9 and print 'number'.
4. Else
   Print "the number".
5. End

IPO

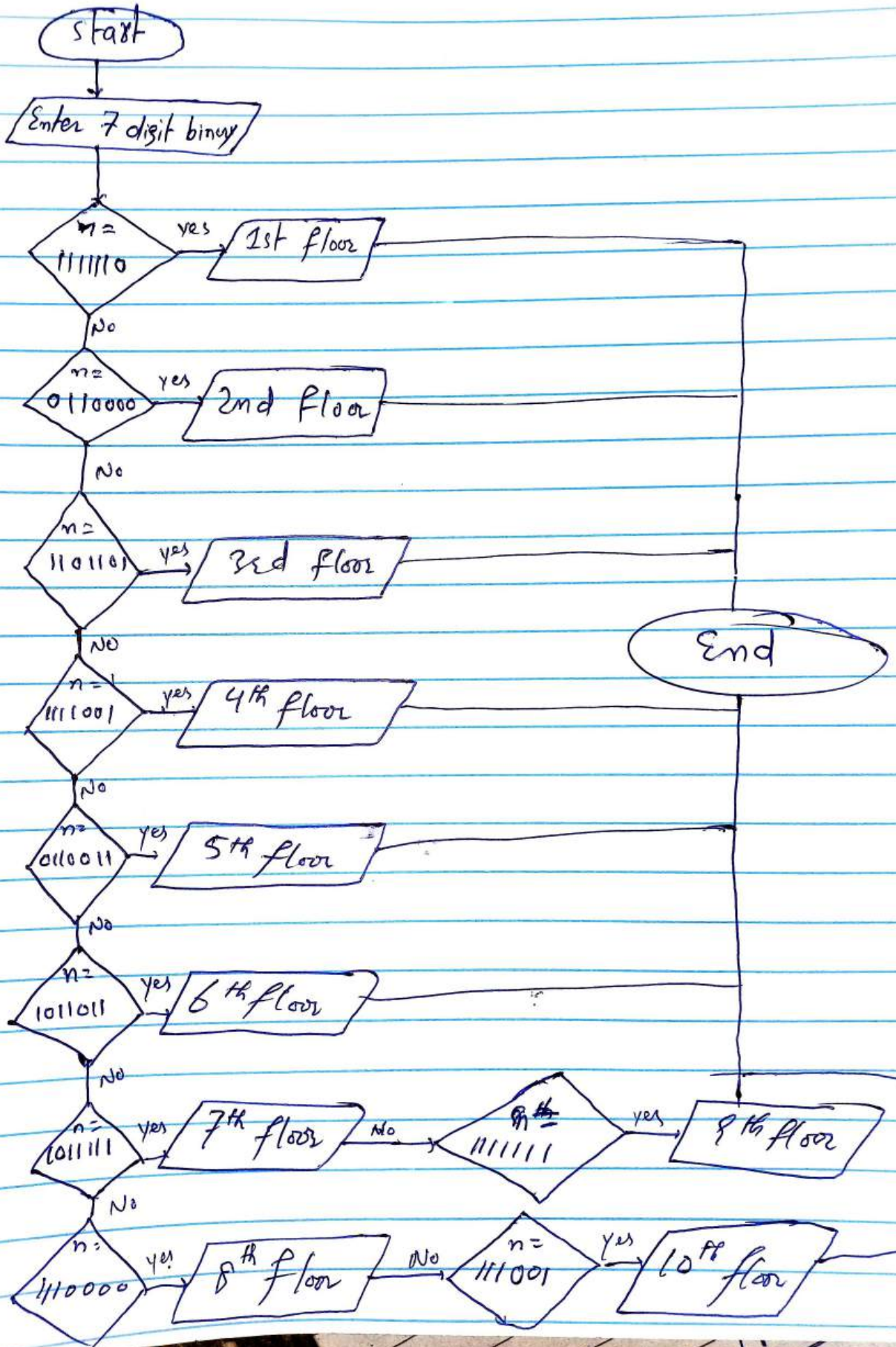
Input	Process	Output
Enter a number	If 0 after 9 then remove 0 & print number. Else Print "the num" End	Display number

FLOW CHART



Date:

FLOWCHART



Name: Kazim Mehdi
Roll No: 24K-0917

Assignment

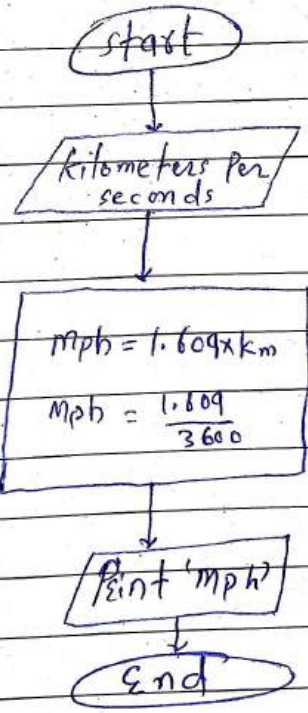
Date:

Q:01

IPO

Input	Process	Output
• ~~Km~~kilometers per second	• start • input kilometer per second • Miles per hour $= \frac{1.609}{3600} \times km$ • out put, miles • End	• miles Per hour.

FLOW CHART



Pseudo code

1. start
2. Read kilometer per seconds
3. $mph = \frac{1.609}{360} \times km$
4. output miles per hr
5. End.

Q:7

Floor

Pseudo

1. start
2. Enter 7 digit binary number = n
3. If n = "111110" Print ("1st floor")
4. Else if n = 0110000 Print ("2nd floor")
5. Else if n = 1101101 Print ("3rd floor")
6. Else if n = 1111001 Print ("4th floor")
7. Else if n = 0110011 print ("5th floor")
8. Else if n = 1011011 print ("6th floor")
9. Else if n = 1011111 print ("7th floor")
10. Else if n = 1110000 print ("8th floor")
11. Else if n = 1111111 print ("9th floor")
12. Else if n = 1110011 print ("10th floor")
13. Display floor

~~Question 1~~

IPO CHART

Input	Process	Output
7 digit binary code = n	If n = 1111100 • Print (1st floor) Else if n = 0110000 • Print (2nd floor) Else if n = 1101101 Print (3rd floor) Else if n = 1111001 then Print (4th floor) Else if n = 0110011 Print (5th floor) Else if n = 1011011 Print (6th floor) Else if n = 1011111 print (7th floor) Else if n = 1110000 print (8th floor) Else if n = 1111111 print (9th floor) Else n = 1110011 print (10th floor) End	Display "floor"