1. Write the Algorithm and draw the flowcharts for the following :
a) Print even numbers between 0 and 99
ALGORITHM
Step1:start
Step2: i=0
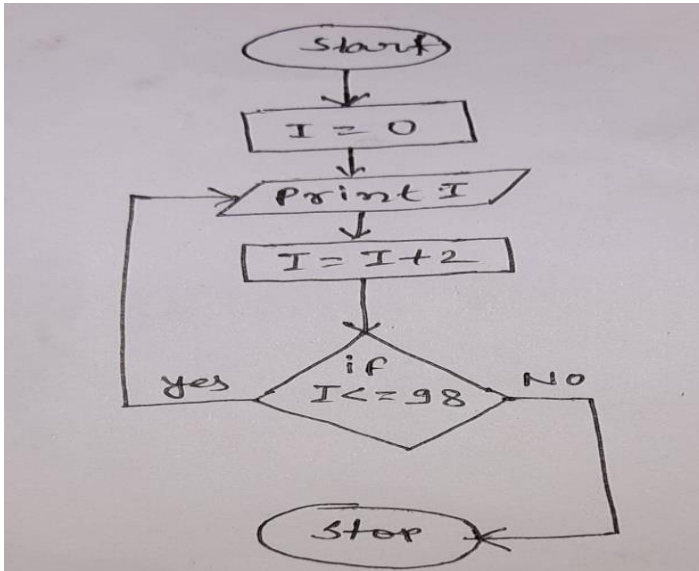Step3: print i
Step4: i=i+2
Step5: if (i<=98) than go to step 3
Step6: stop
FLOWCHART

b) Print odd numbers less than a given number. It should also calculate their sum and count
ALGORITHM
Step1: start
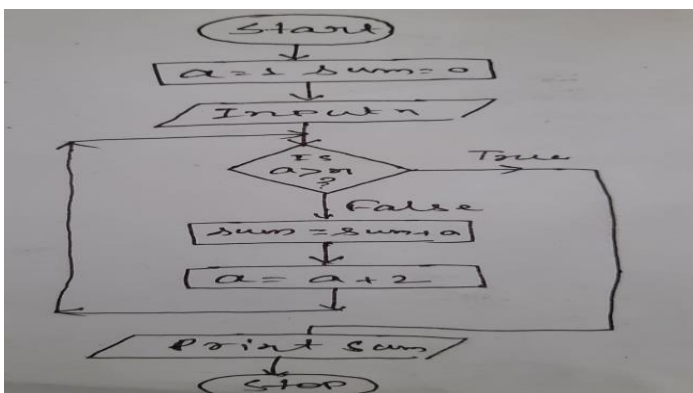Step2: a=1 and sum = 0
Step3: read n
Step4: if (a>n) than go to step 7
Step5: sum=sum+a
Step6: a=a+2, go to step 4
Step7: print sum
Step8: stop
FLOWCHART

c) Calculate the average of 25 test scores.
ALGORITHM
Step1: Start
Step2: I=1 and N=25
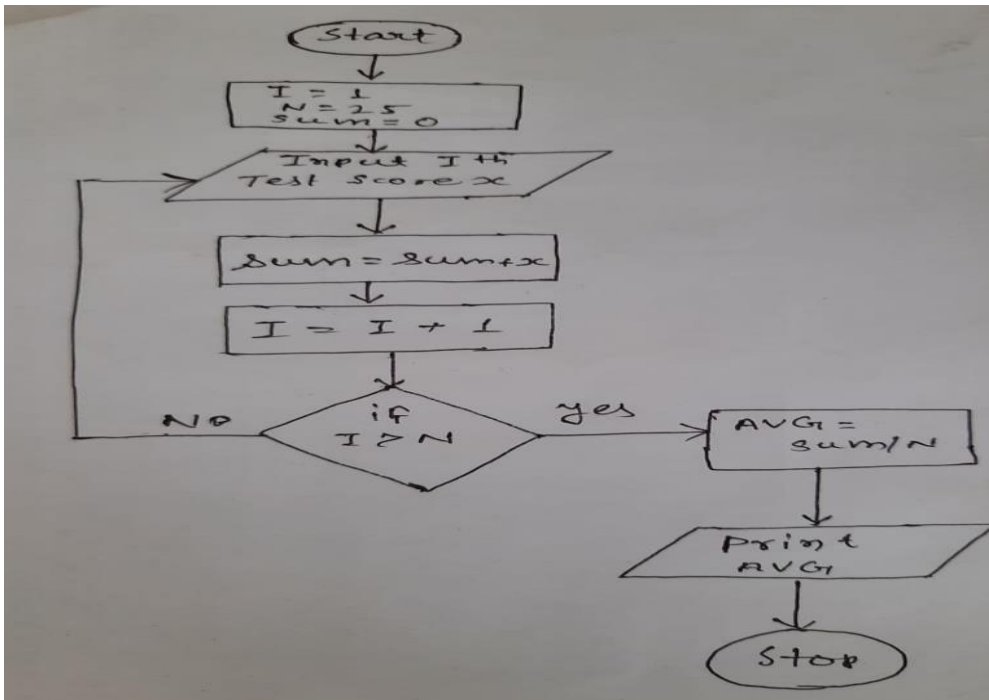Step3: Sum=0
Step4: Input the test score
Step5: Sum=sum+x
Step6: If i>N than go to step 4
Step7: Average = sum/N
Step8: Print average
Step9: stop
FLOWCHART

d) Print table of any number N (say 7)
ALGORITHM
Step1:start
Step2:read 7
Step3:i=1
Step4: for i<=10
Step5: 7*1
Step6 : i=i+1
Step7: go to step 4
Step8: print 7*i
Step9: end

FLOWCHART
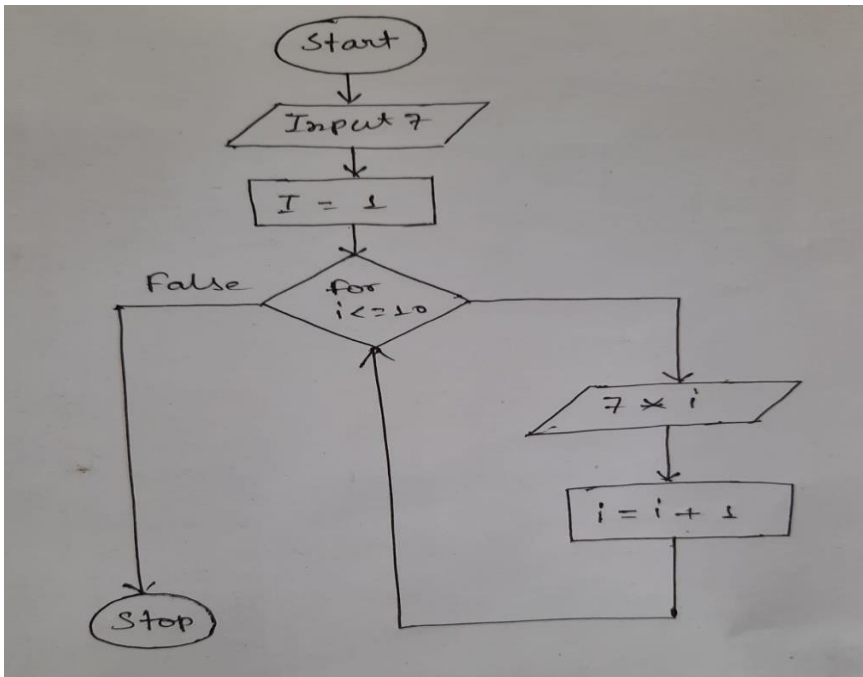
e) Check if the given number is Prime or not.
ALGORITHM

© 1. Start
2. Read a "n" value to check primor
3. Set $i = 1$, Count $= 0$
4. if $i < n$ if true go to steps. else
   go to step 8

5. check the Condition $n \cdot i == 0$
   if true then go to step 6. false
   go to stop 7

6. Set Count $=$ Count $+ 1$

7. $i = i + 1$ go to step 4

8. check count, if count $== 2$
   display prime, if not display
   at not prime

9. Stop
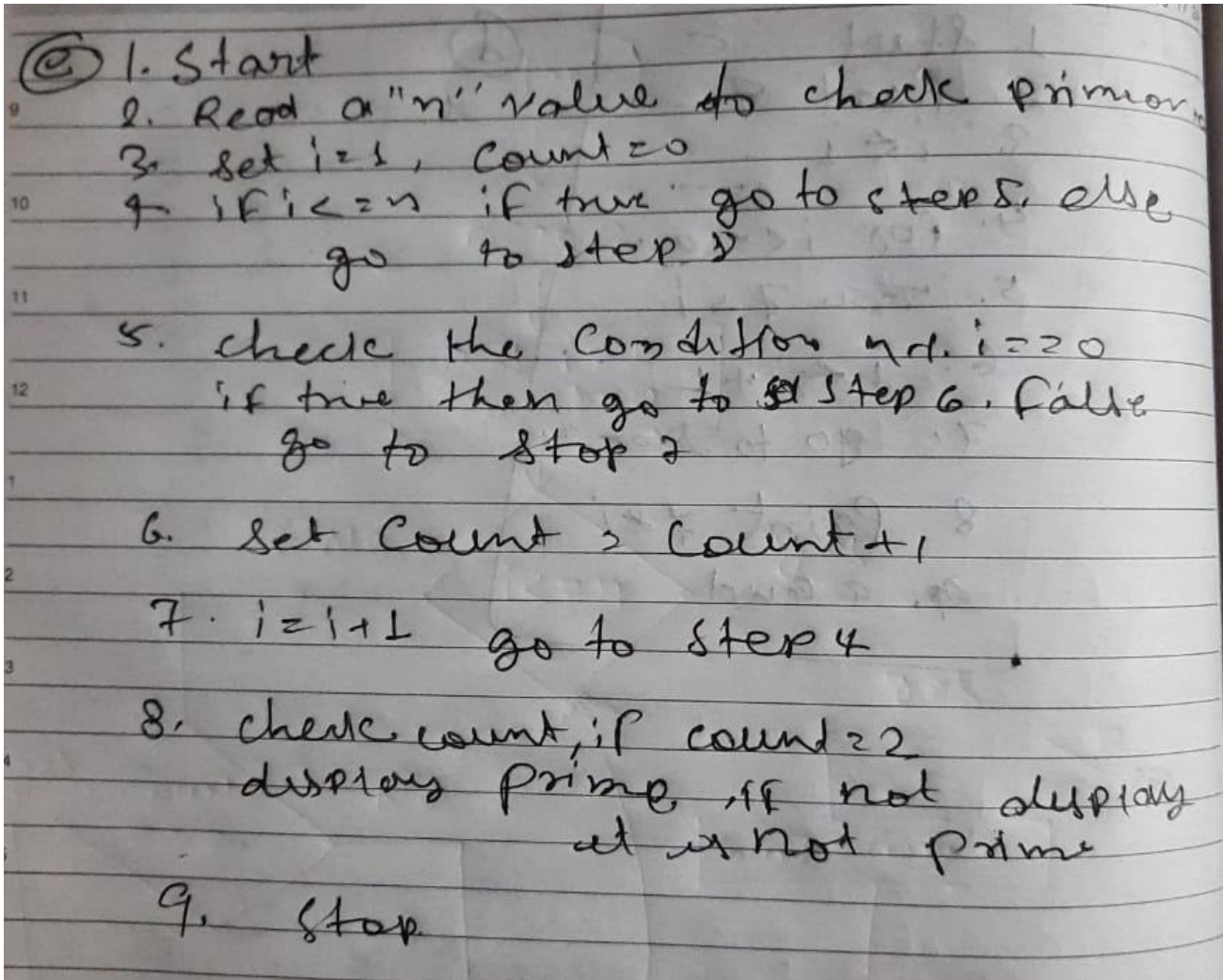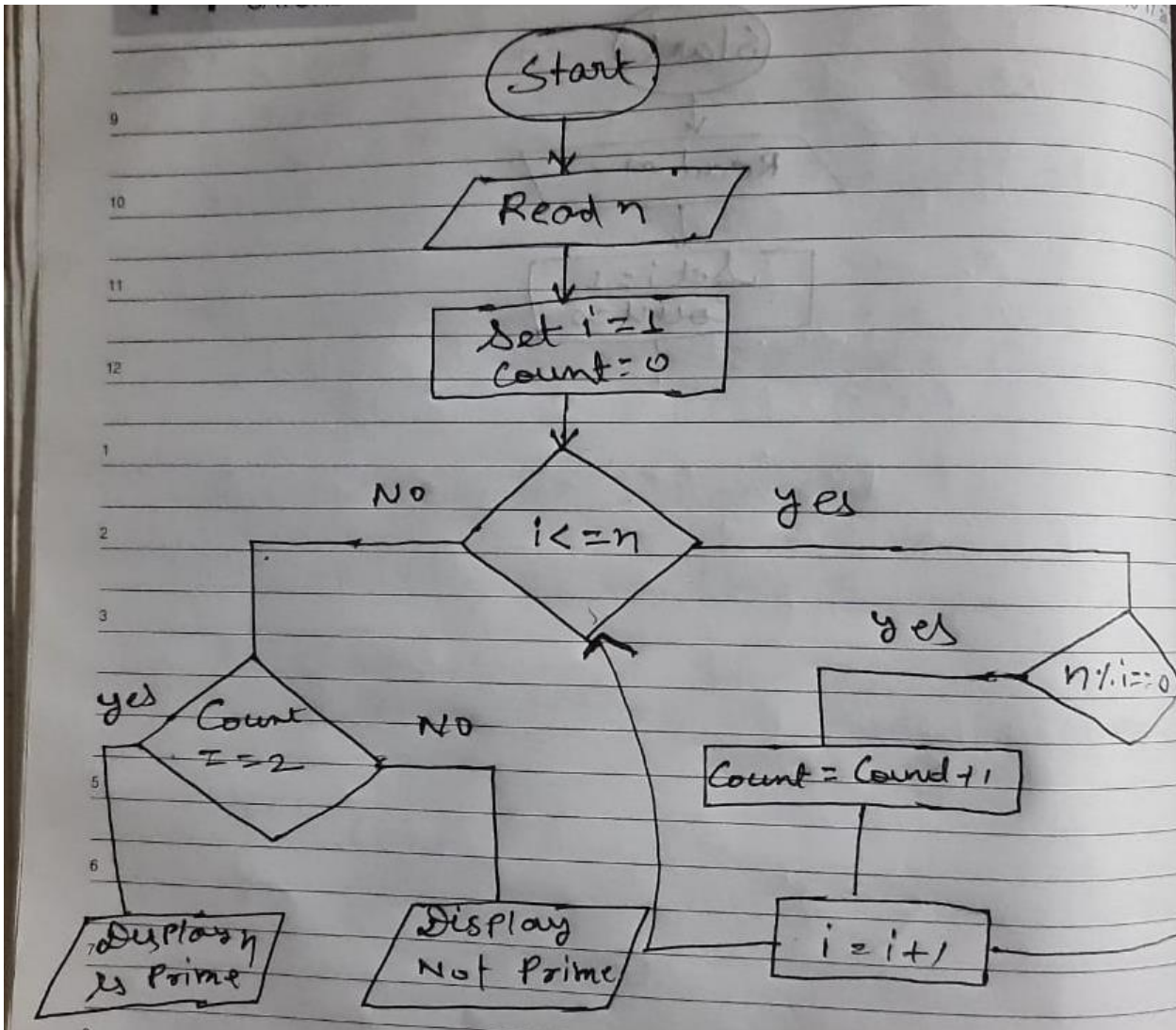
FLOWCHART

f) Print odd numbers backward from 99 to 1
ALGORITHM

1. Start
2. i ← 99
3. Print i
4. i = i−2
5. if i >= 1 then go to step
6. Stop

FLOWCHART

```
                    ┌─────────────┐
                    │    Start    │
                    └──────┬──────┘
                           │
                           ▼
                    ┌─────────────┐
                    │   i = 99    │
                    └──────┬──────┘
                           │
                           ▼
              ┌──────────────────────┐
         ┌───►│      Print i         │
         │    └──────────┬───────────┘
         │               │
         │               ▼
         │    ┌──────────────────────┐
         │    │    i = i - 2         │
         │    └──────────┬───────────┘
         │               │
         │               ▼
         │            ╱ if  ╲
         │  True    ╱ i >= 1 ╲
         └─────────◄          ►
                    ╲        ╱
                      ╲    ╱
                        │ False
                        ▼
                  ┌───────────┐
                  │   Stop    │
                  └───────────┘
```