Assignment No. 1

1) @ Algorithm to find Average of three Nos.

Step 1 - Start.
Step 2 - Read 1st no. as 'a'.
3 - Read 2nd no. as 'b'.
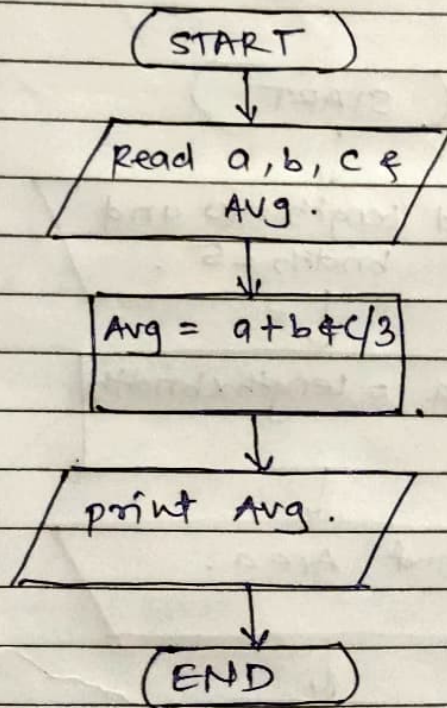4 - Read 3rd no. as 'c'.
5 - Average is equal to a + b + c / 3.
6 - Print "Average".
7 - End.

Flowchart →

```
        ( START )
            │
            ▼
     / Read a, b, c & /
     /     Avg.      /
            │
            ▼
     │ Avg = a+b&c/3 │
            │
            ▼
     / print Avg.    /
            │
            ▼
        ( END )
```

1) (b) Find Area of Rectangle whose lengths and bridths are given.

Algorithm :-

step 1 — start .
2 — Read length as 10
3 — Read bridth as 5.
4 — Area is equal to 10×5.
5 — print Area.
6 — End.

Flow Chart :-

(START)

↓

Read length = 10 and bridth = 5.

↓

Area = length × bridth

↓

print Area.

↓

(END)
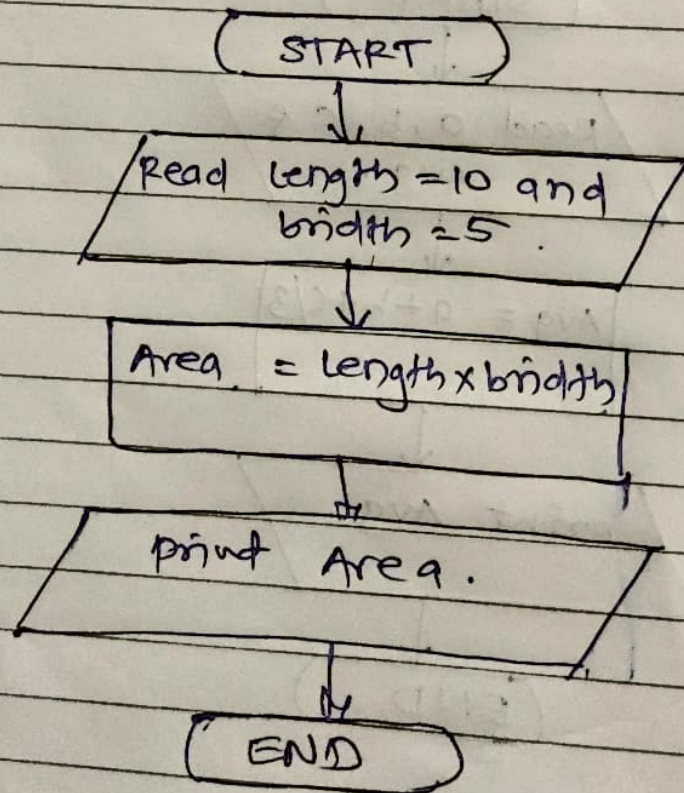
2) Flwocharts for following

a) Age of person.

```
          ┌─────────┐
          │  START  │
          └─────────┘
               │
               ▼
        ╱─────────────────╲
       ╱  Read Age as 'A'  ╱
      ╱───────────────────╱
               │
               ▼
            ╱╲  if
           ╱  ╲
          ╱A > 60╲────── False
          ╲      ╱
           ╲    ╱
            ╲  ╱
             ╲╱
              │ True.
              ▼
    ╱─────────────────────╲
   ╱ print "senior citizen" ╱
  ╱──────────────────────╱
              │
   ╱─────────────────────╲
  ╱ print " Not a senior   ╱ ◄───
 ╱      citizen".         ╱
╱────────────────────────╱
              │
              ▼
          ┌─────────┐
          │   END   │
          └─────────┘
```

b) Maximum of two Numbers.

```
                    ┌─────────────┐
                    │    START    │
                    └─────────────┘
                           │
                    ╱─────────────╲
                   ╱  Read 'a' & 'b' ╲
                    ╲─────────────╱
                           │
                          ╱╲
                      If ╱    ╲        False
                        ╱ a > b ╲──────────────┐
                        ╲        ╱              │
                          ╲    ╱                │
                           ╲╱                   │
                           │ true              │
                    ╱─────────────╲            │
                   ╱  print 'a'    ╲           │
                    ╲─────────────╱            │
                           │                    │
                    ╱─────────────╲            │
                   ╱  print 'b'.   ╲◄──────────┘
                    ╲─────────────╱
                           │
                    ┌─────────────┐
                    │     END     │
                    └─────────────┘
```

c) Print smallest nos among 3 nos.

```
                        ┌─────────────┐
                        │    START    │
                        └──────┬──────┘
                               │
                               ▼
                        ╱──────────────╲
                       │   Read 'a', 'b'  │
                       │     &  'c'.      │
                        ╲──────────────╱
                               │
                               ▼
                            ╱──────╲
         false      ╱──────╱   if   ╲──────╲     True
         ┌─────────╱         a < b          ╲─────────┐
         │          ╲──────────────────────╱          │
         ▼                                             ▼
      ╱──────╲         false         false         ╱──────╲
     ╱   if    ╲─────────────►    ◄─────────────   ╱   if    ╲
    ╲   b < c  ╱                                   ╲   a < c  ╱
     ╲────────╱                                     ╲────────╱
         │                    │                         │
       True                   ▼                       True
         │              ┌────────────┐                 │
         ▼              │  print c   │                 ▼
   ┌────────────┐       └─────┬──────┘          ┌────────────┐
   │  print b   │             │                 │  print a   │
   └─────┬──────┘             ▼                 └─────┬──────┘
         │              ┌──────────┐                  │
         └─────────────►│   END    │◄─────────────────┘
                        └──────────┘
```
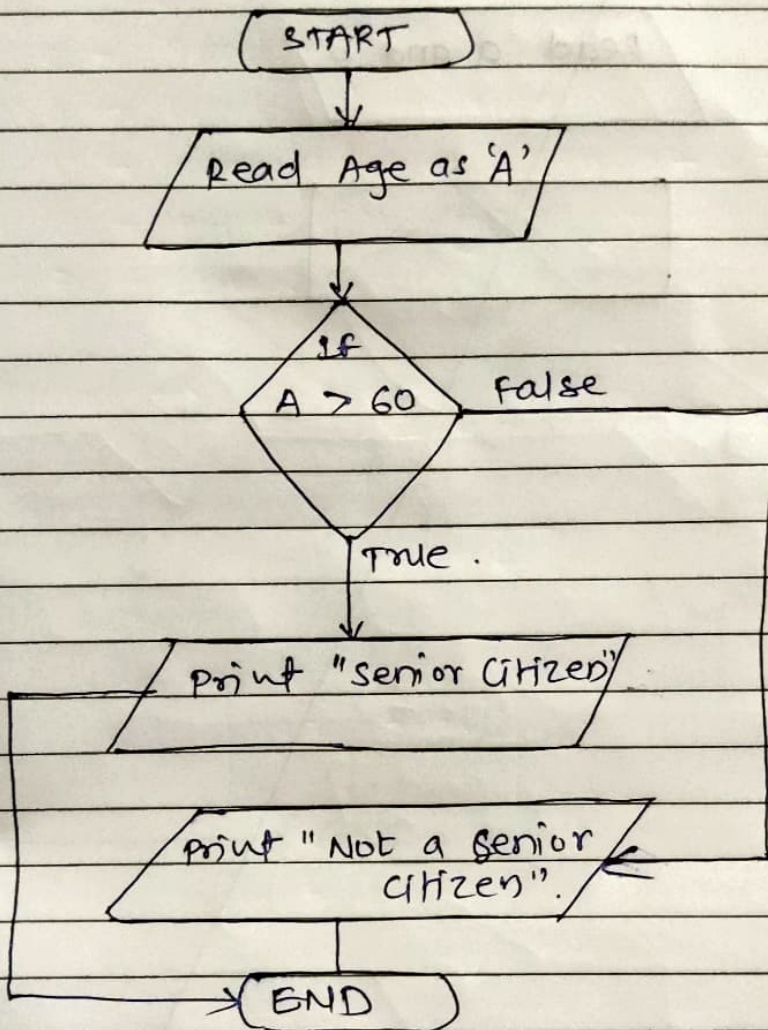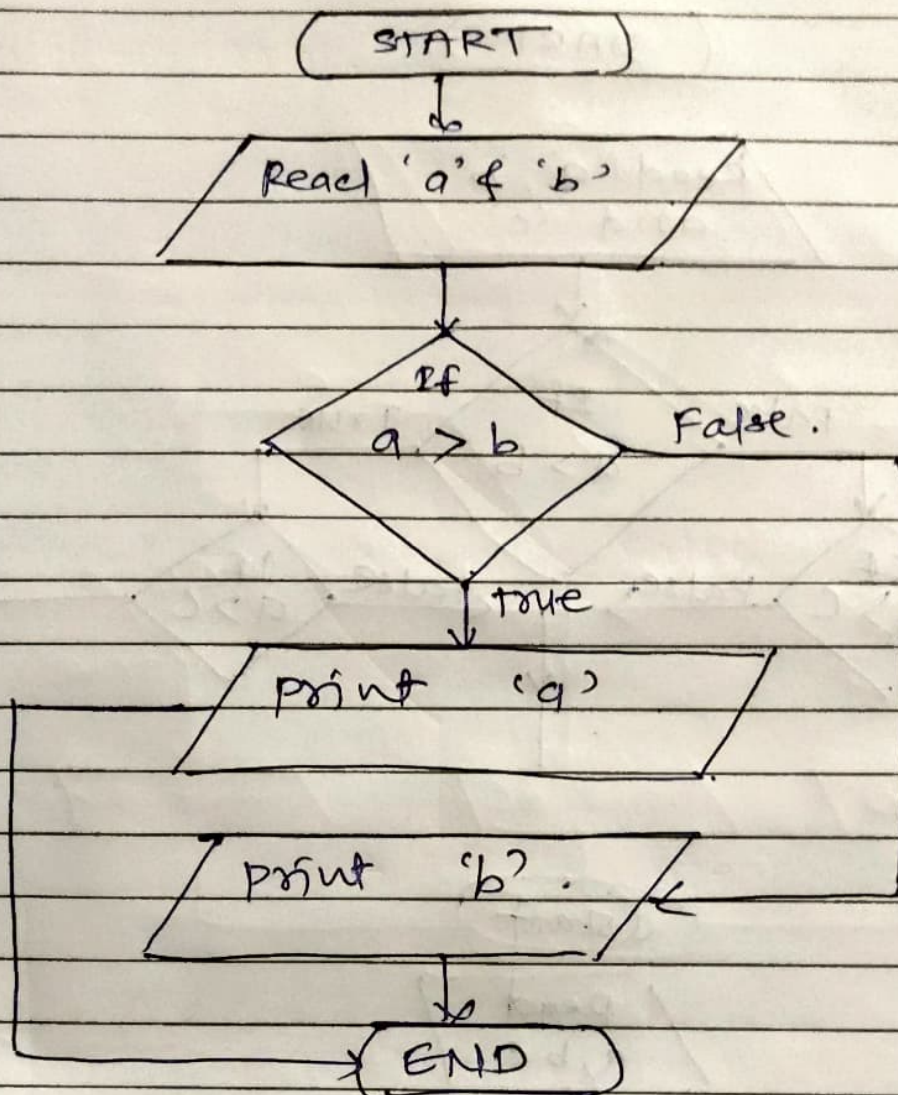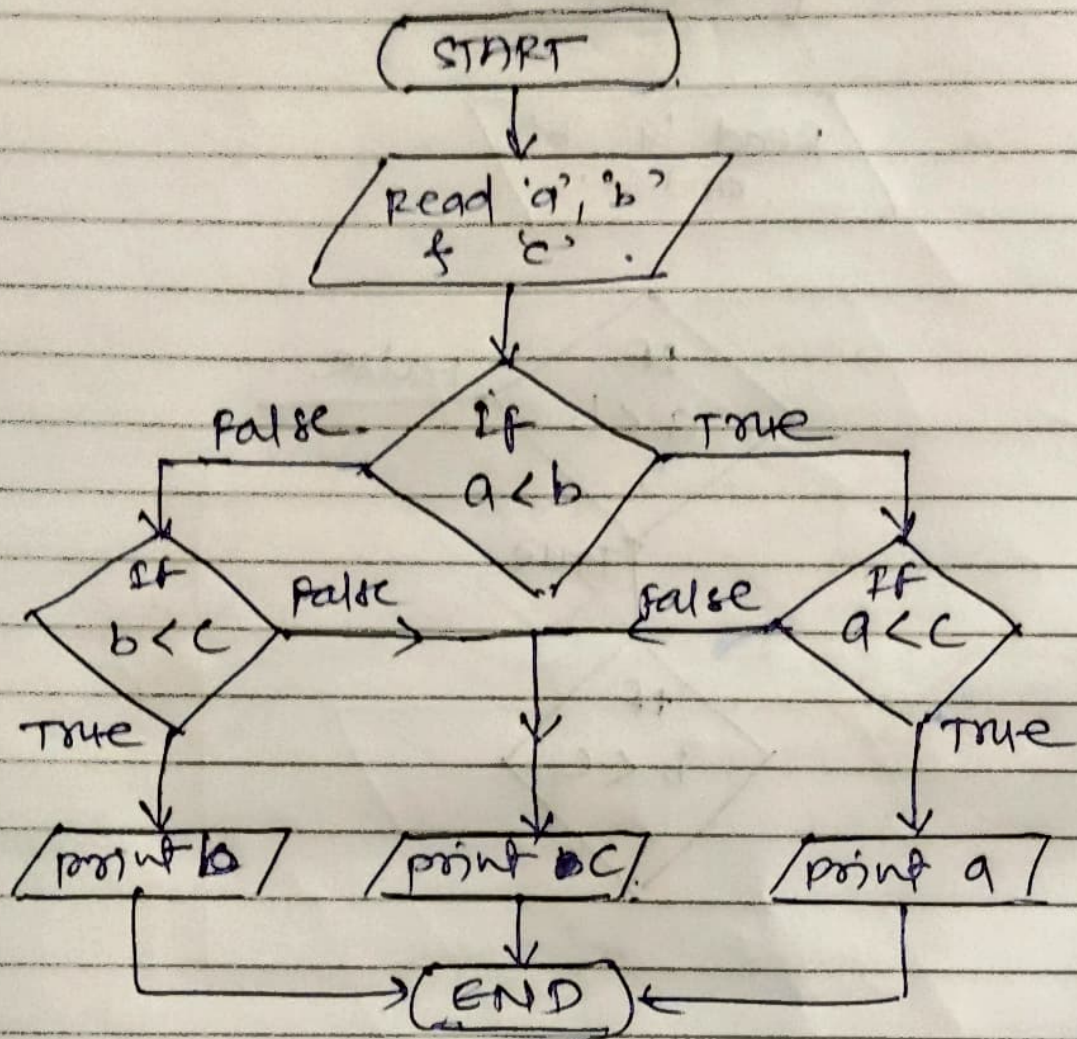
d) Input take in Inches and convert to meter.

START

Read 'a' in Inches

meter = $a \times 0.0254$

print meter

END