```
                    ( Start )
                        |
                        v
        +-------------------------------+
        |   Engine  =  0                |
        |   Count   =  0                |
        |   Number  =  0                |
        +-------------------------------+
                        |
                        v
        /-------------------------------/
       /    Input  Size.               /
      /-------------------------------/
                        |
                        v
                      / is \                Yes
                 <  Size = -1  >  ----------------->  [ Average - Engine/Number ]
                      \     /                                      |
                        |                                          v
                        | No                          /----------------------------/
                        v                            /   output                   /
                      / is \                  Yes   /    Average ,  Count        /
                 <  Size >1.5  >  ------------>  [ Count  =  Count + 1 ]
                      \     /                              
                        |  <-------------------------------+
                        v
        +-------------------------------+
        |   Number = Number + 1         |
        +-------------------------------+
                        |
                        v
        +-------------------------------+
        |   Engine  =  Engine + 1       |
        +-------------------------------+
```

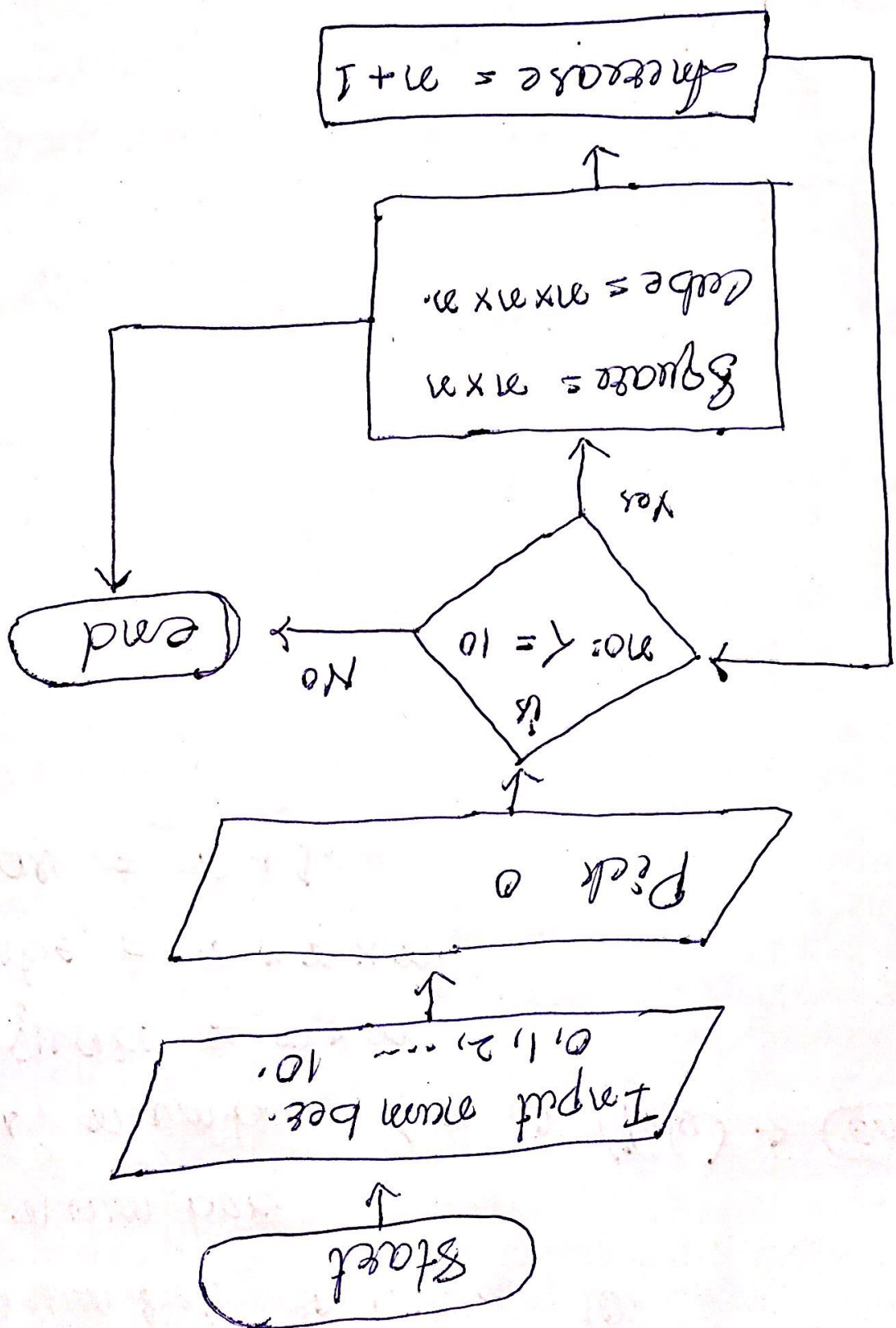| Engine	Count	Number	Size	average	output
3	1	1	3	—	—
5	2	2	2	—	—
6	—	3	1	—	—
11	3	4	5	1	—
11	—	5	0	—	—
—	3	-2	-1	11/5	2.2

$\Rightarrow$ Input number $0, 1, 2, \ldots \, 10$.

Pick a number.

check is number $\chi = 10$ (False) $\rightarrow$ (End)

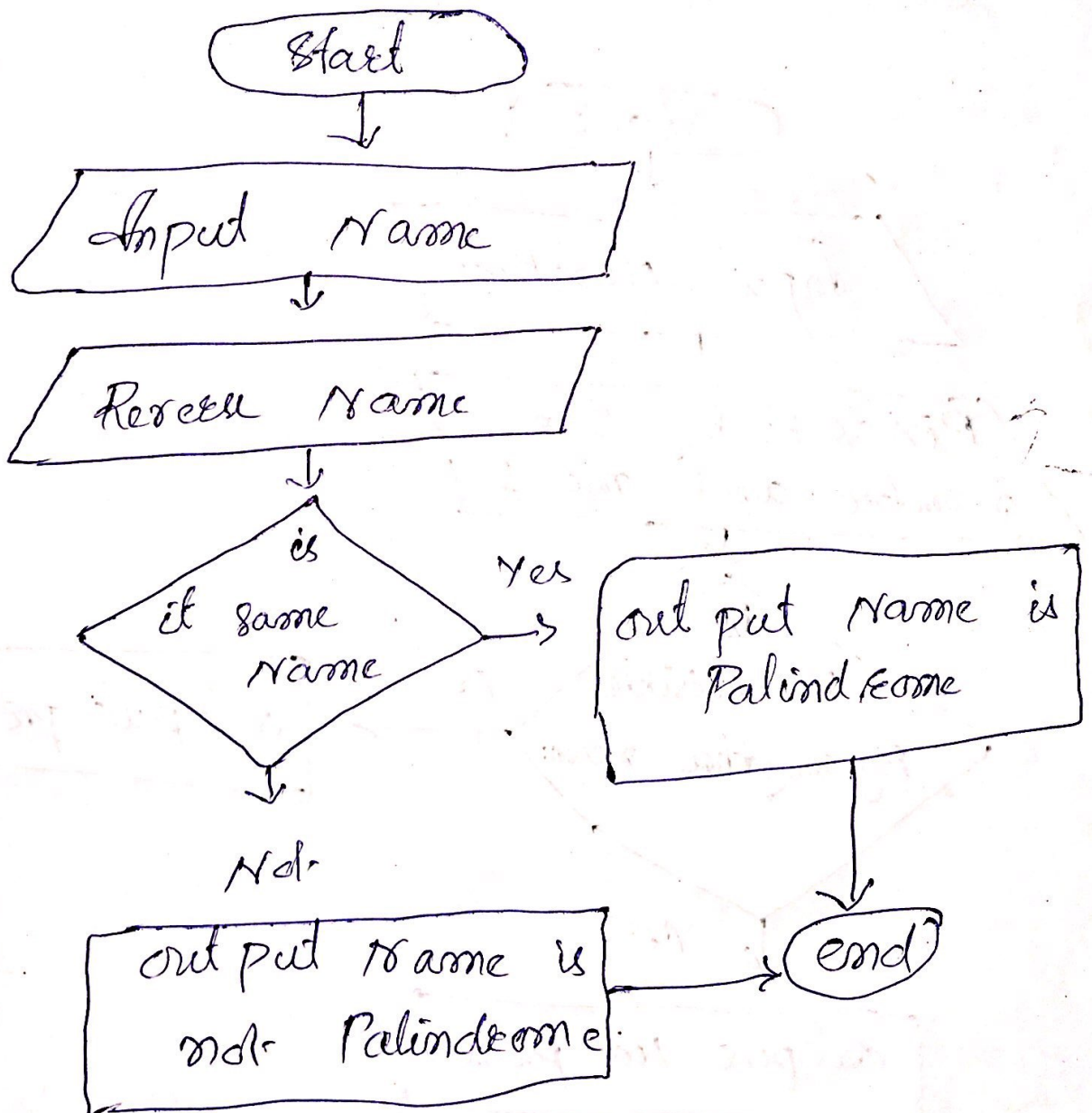True$\rightarrow$ Now Square $= n \times n$.

cube $= n \times n \times n$.

Increase $= n + 1$

⇒ Input name

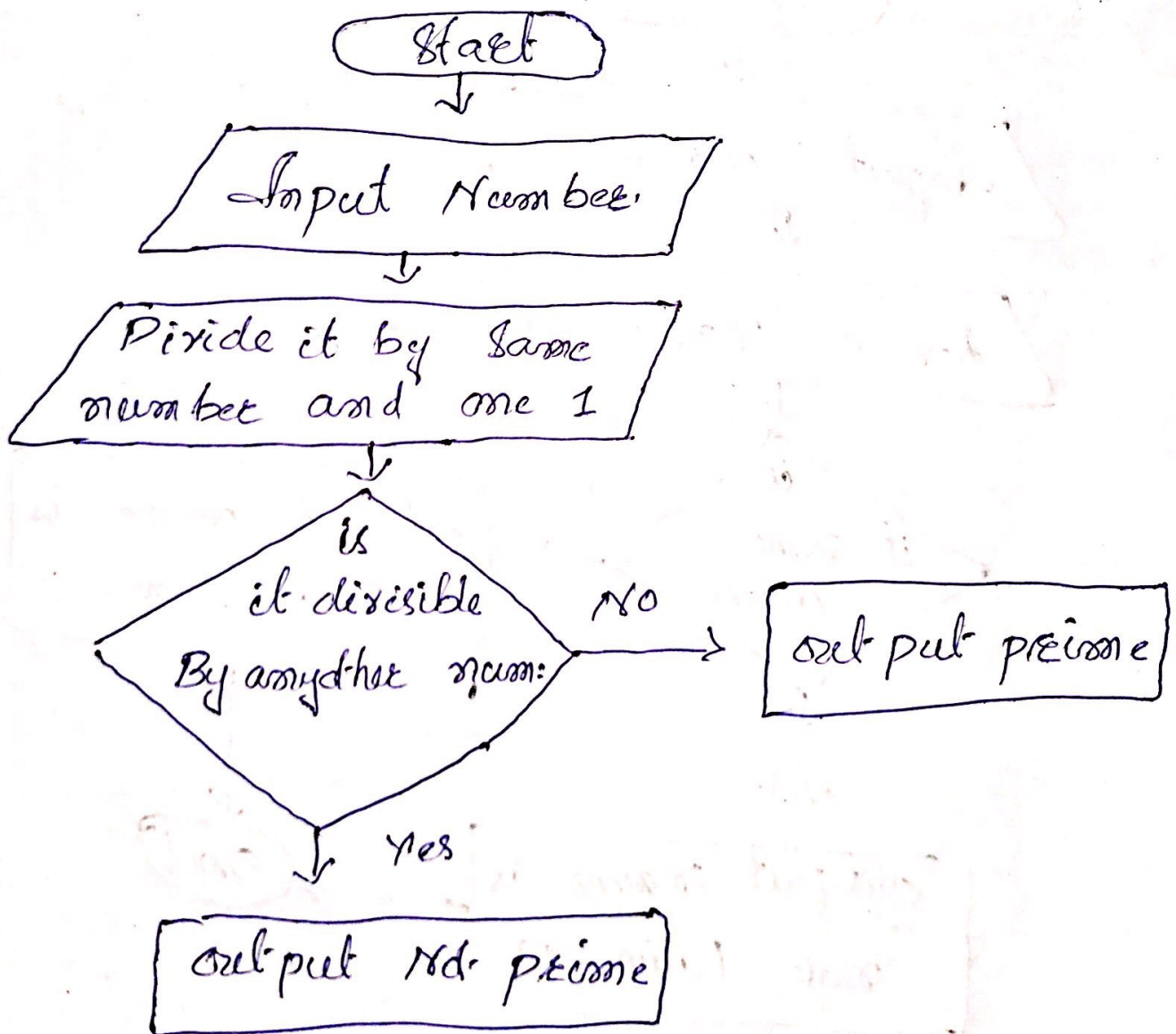Now reverse or backward the name. check is it same name → true → output Name that is not same end.

Start

Input Name

Reverse Name

is it same Name

Yes → output Name is Palindrome

Not →

output Name is not Palindrome

end

⇒ Input Number.

Divide it by Same number and 1

→ Is it divisible by any other number then output not prime number else output Prime number.

```
        ┌──────────┐
        (  Start   )
        └──────────┘
             │
             ▼
    ╱─────────────────╲
   ╱   Input Number.    ╲
  ╱─────────────────────╱
             │
             ▼
   ╱────────────────────╲
  ╱  Divide it by Same    ╲
 ╱   number and one 1      ╲
 ╲────────────────────────╱
             │
             ▼
          ╱──╲
         ╱ is  ╲
        ╱it divisible╲      NO      ┌──────────────┐
        ╲By anyother num:╱──────────▶│ output prime │
         ╲            ╱              └──────────────┘
          ╲──╱
             │ Yes
             ▼
   ┌──────────────────┐
   │ output Not prime │
   └──────────────────┘
```

⇒ Set total and average to zero.

Set grade counter one
while the grade counter is less than
or equal to 10.
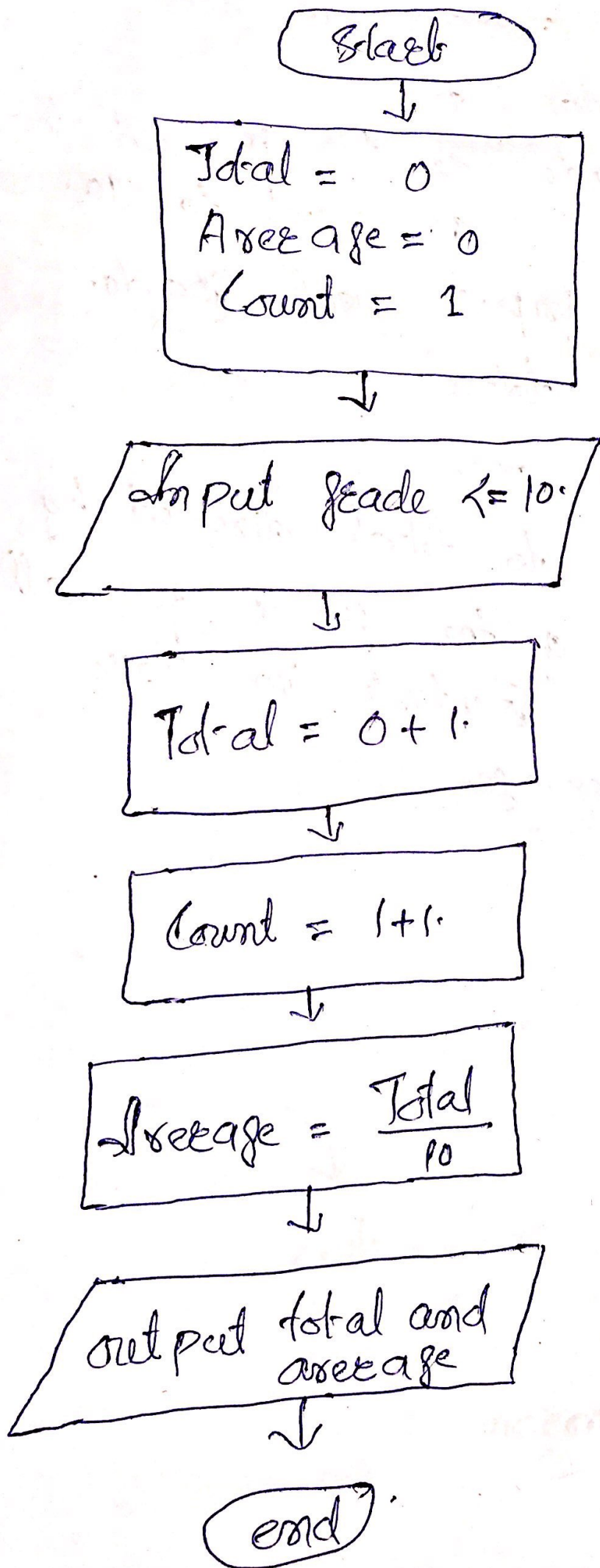
Ask student to input next grade.

Add grade to total.

Add grade to one.

Set class average to total divided by ten.

Print the total of the grades for all
the student in class

→ Print class average.

Start

Total = 0
Average = 0
Count = 1

Input grade <= 10.

Total = 0 + 1.

Count = 1 + 1.

Average = $\dfrac{Total}{10}$

output total and average

end

(2)

⇒ Input Percentage.

Is percentage $x = 80$ then output (A)

Is percentage $x = 70 < 80$ output (B)

Is percentage $y = 70 < 70$ output (c)

Is percentage $y = 60 < 70$ output (D)

Is percentage $y = 50 < 60$ output (D)

Is percentage $y = 50$ Below so then output (E)

If percentage is

(2).

```
           ( Staet )
              |
              v
   / Input Percentage. /
              |
              v
         /   is   \
        / Percon: >= 80 \  --Yes-->  [ output Grade A ]
         \        /
           \    /
            No
              |
              v
         /   is   \
        / Pre: >= 70 < 80 \  --Yes-->  [ output Grade B ]
         \            /
           \        /
            No                          ( end )
              |
              v
         /   is   \
        / Pee: >= 60 < 70 \  --Yes-->  [ output Grade C ]
         \            /
           \        /
            No
              |
              v
         /   is   \
        / Pee: >= 50 < 60 \  --Yes-->  [ output Grade D ]
         \            /
           \        /
            No
              |
              v
         /   is   \
        / Pee: < 50 \  --Yes-->  [ output Grade F ]
         \        /
```