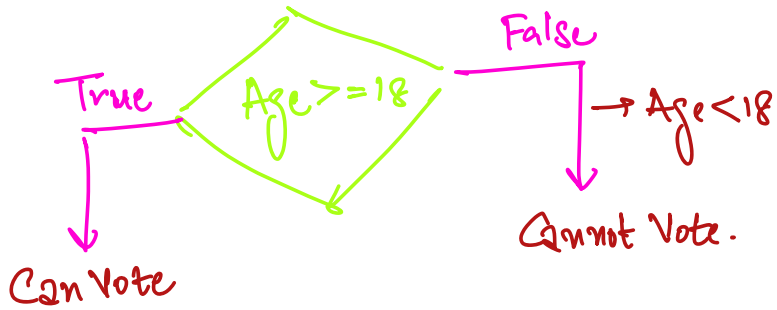
If / Else.



If Age ≥ 18 , ✓
Else ✗

Ex2

SpO2 ≥ 97 → All is OK

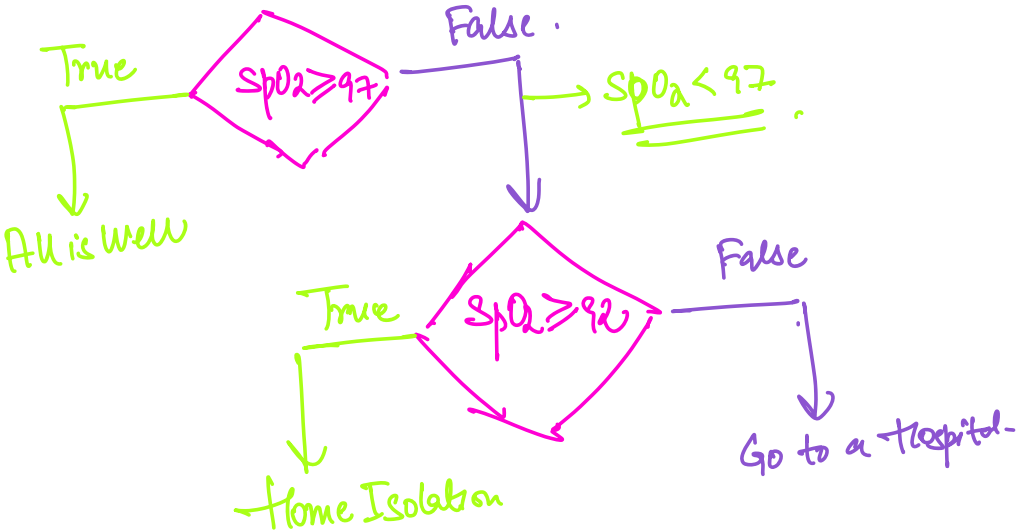
SpO2 < 97

SpO2 < 92 → Go to the Hospital.

SpO2 < 97 and SpO2 ≥ 92 → Home Isolation

98.

94.



int, long, float, double

```
boolean x = true;
boolean y = false;
```

AND, OR

Oyo | MMT | Airbnb | Housing

→ 2 bedrooms (1)
→ Beachside. (2)

TRUTH TABLE of OR.

(1)	(2)	result
true	false.	true
true	true	true
false	true	true
false	false	false.

AND, OR → boolean.

→ Remainder.

15/3 → 0

17/3 → 2

15/3

Repeated subtraction till you can't do it further.

17/3

Dividend = Divisor × Quotient + Remainder

(no. to be divided) (no. with which you divide) (how many time were you able to subtract Divisor from dividend) & Remainder.

$17 = 3 \times 5 + 2$

Quotient

$16/4 \rightarrow 4$

16 | $16\%4 \rightarrow 0$

If you divide 16 by 4. what would be the remainder.

Odd nos → not divisible by 2

Even nos → divisible by 2.

$x\%2 == 0$ checks whether LHS = RHS

Given a no. x, determine if its odd/even.


```
if( x%2 ==0) {
    S.O.Pln("even");
} else {
    S.O.Pln("odd");
}
```

Q Given a no. x, print its last digit.

1257 → 7

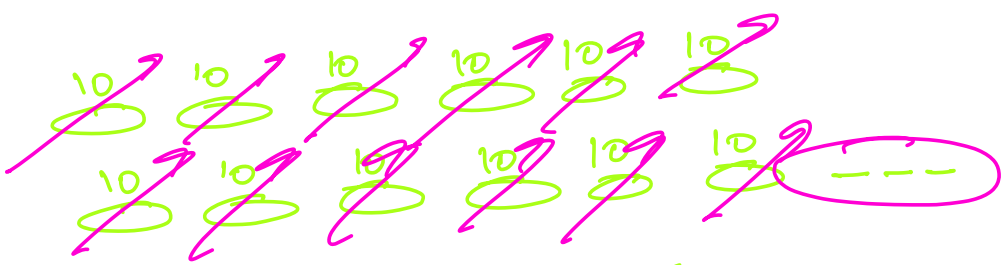
1 → 1

21 → 1

100 → 0

123/10 → ✓ 123%10 → 3.

123 10 → 3



2 → 2.

2/10 ✓ 2%10 → 2

100/10

100

100%10 → 0.

`x%10` → last digit of x.

Q. FizzBuzz.

Given a no. N,

Print "Fizz" if N is divisible by 3

Print "Buzz" if N is divisible by 5

Print "FizzBuzz" if N is divisible by (5 & 3)

I/O.

N=10 → Buzz

N=18 → Fizz.

N=7 → X

N=30 → FizzBuzz.

30

```
if( N%3 ==0){
    S.O.P("Fizz");
} else if (N%5 ==0){
    S.O.P ("Buzz");
} else if ( N%5==0 && N%3==0){
    S.O.P("FizzBuzz");
}
```

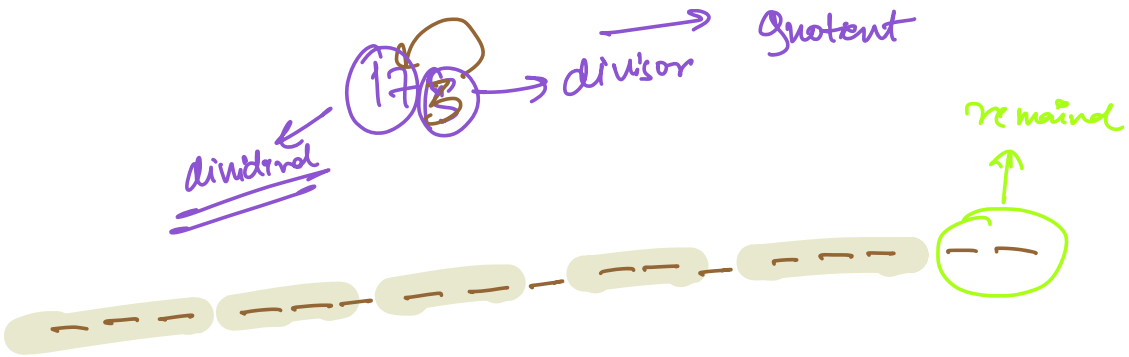
18

10
18
7
30

```
if(N%5==0 && N%3==0)
    S.O.P("FizzBuzz");
} else if (N%5 ==0){
    S.O.P ("Buzz");
} else if ( N%3 ==0){
    S.O.P("Fizz");
}
```

Revision

- int / long
- float double
- integer division
- if else, else if
- remainder
- logical op.
- relational op.



$2/10 \rightarrow 0$ $\quad$ $2\%10 \rightarrow 2$

```
float x = 3.14f;
```

↓

```
float x = (float) 3.14;
```

~~int~~ `long x = (long) 243;`

`x%10` → $123\%10 \rightarrow 3$

$23\%10 \rightarrow 2$

$100\%10 \rightarrow 0$