Uniary → pre | post inc | dec

++ → +1

-- → -1

pre Increment

(I) int a = 10;

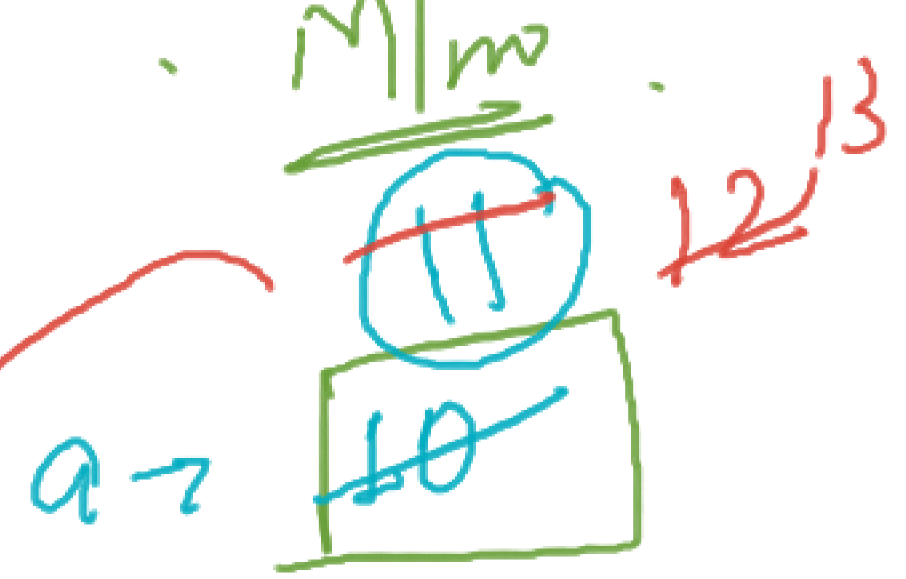
Syso (++a) ; // 11

(1) ++ → +1 add

(2) a

(II) ++a ; // ++ 11 → 12

a++ ; // 13



i ; i ; i++

++i

a = 10

a = 100;

a → 100

(III) int b = ++a;

unary (1)

Assignment (2)

b = 14

a → 8 7

a → 13 14

eg: int a = 5;

++a; // 6

int b = a + ++a + a;

6 + 7 + 7

Syso(a); 7

(b); 20

post inc → value ++;

int b = 5;

(1) Syso (b ++); // 5

(2) b++; // 6++ → 7
Syso (b); // 7

(3) int c = b++;
Syso (c); // 7
(b); // 8

b → 5 6 7 8

int c = b++ + ++b;

int x = 2;
int y = 1;
int z = x++ + ++x + ++y + ++y + x + y;

x = 2 3 4

y = 1 2 3

Syso -x - 4
-y - 3
-z - 17

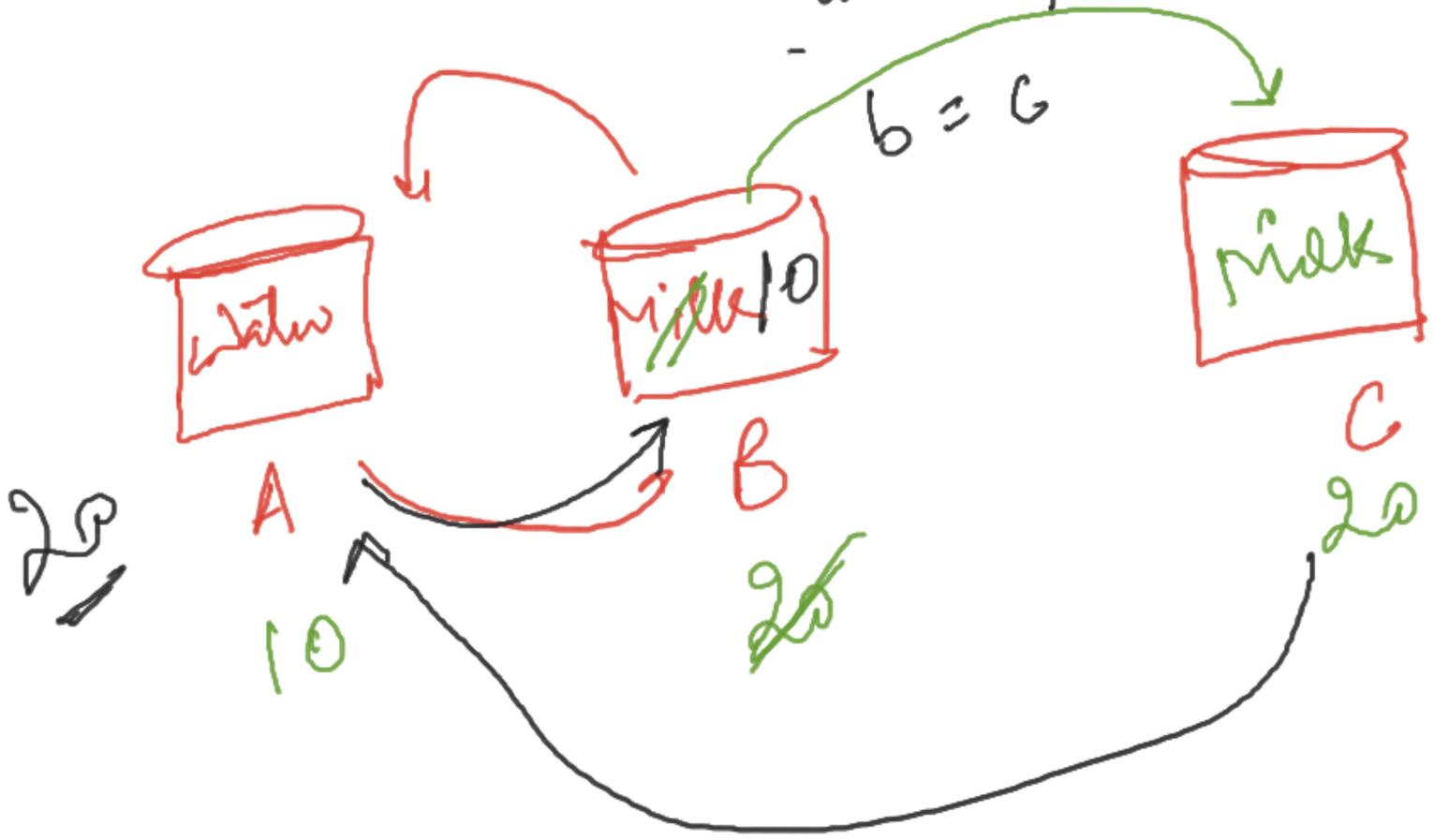
Swapping

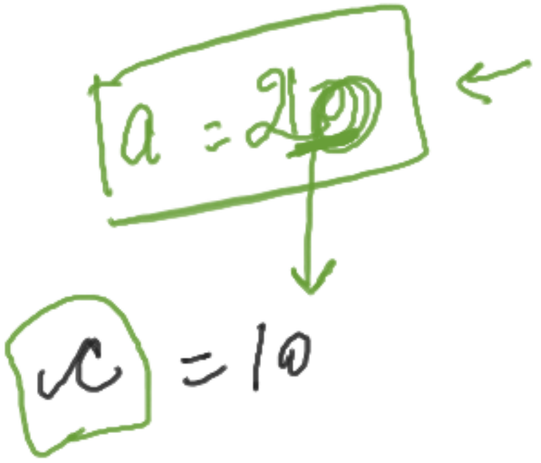
int a = 10; int b = 20;

int c = a; // c = 10

a = b; // a = 20

b = c





b = 10

Without using third variables:

```
int a=4;
int b=5;
```

a=5
b=4

a = 9
b = 5

5
9
a = 4

```
a = a+b ; // 9
b = a-b; // 9-5 = 4
a = a-b; // 9-4 = 5
```

b = 5 4

Sum of digits of a Numbers → (II)

$346 \% 10 \rightarrow 6$

$n = 346$

$= 3 + 4 + 6 = 13$

Mod

(I) int d1 = n % 10 = 6

34

$(d1 + d2 + d3) \Rightarrow$ [illegible]

(II) n = n / 10 → 34

Rem

(III) int d2 = n % 10 → 34 % 10 → 4

int d3 = n / 10; // 3

10) 34 (3
30
4

%) 346 / 10 (34
30
46
40
6

Reverse of a Number → 153 → 351 → without Loop.

Sum of cube of digits → x = 141

$1^3 + 4^3 + 1^3$ ≠

Decision making Stmnts :

- → if
- → if-else
- → ladder elsif
- → Nested ifelse
- → Switch case

(I) if Statement :- Keyword ← if (exp.) {   (true)

// Stmnts

}

int if = 10; ✗

false

if (true) {

// Syso ("i"); ✗

}

Class Name

Scanner scn = new Scanner(System.in);

Creating an object of Scanner class

BuiltIn Class

variable

Keyword

ClassName

property/variable

By using 'new' Keyword we can create an object of class

```
Class A {

}

A obj = new A();
```