

1. Sys0 ("Value of a and b is 30 | 0 20 concatenate
Value of a and b is " + 10 + 20) ; opr

2. int a = 20 ; a'

int b = 30 ;

✓ Sys0 (a+b + "Sum is") ;

// 50 Sum is ✓

4. int z = 20 ;

z++ ; 21

++z ; 22

Addition

3. int x = 100 ;
 int y = 20 ;

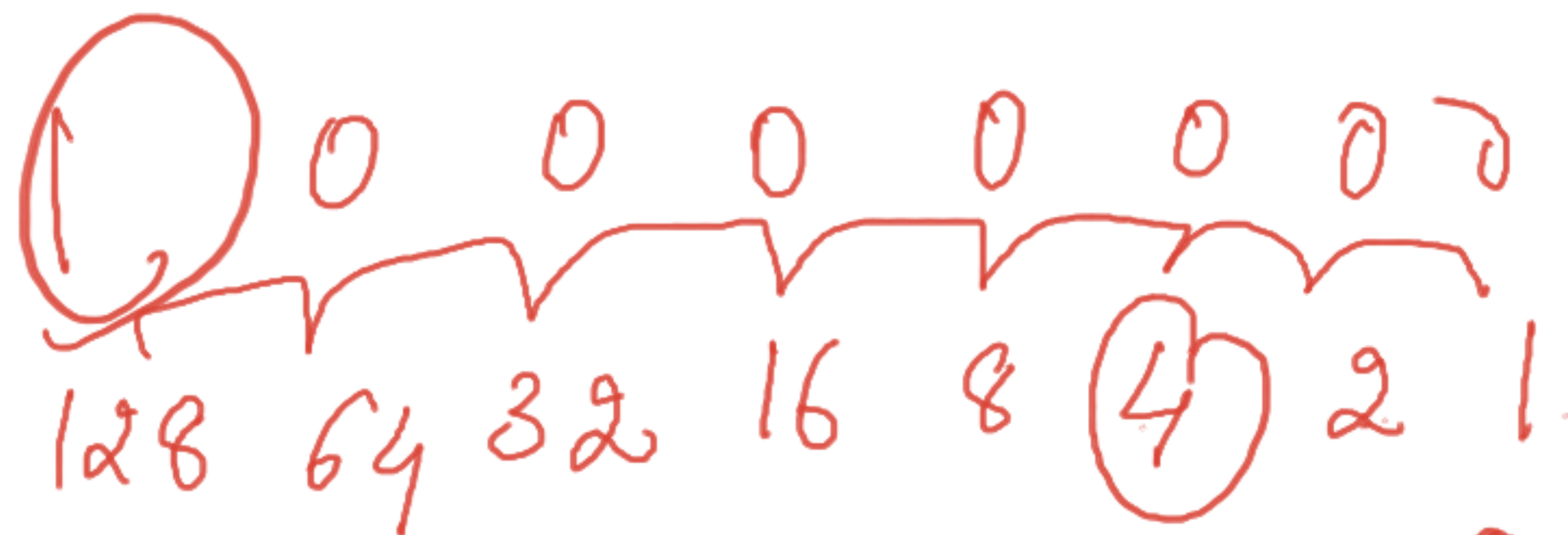
Sys0 ("Sum is" + (x+y)) ;

Sum is 120 ;

addition operation

✓ Sys0 (2++ + ++ 2) ; // 24 ✓

✓ Sys0 (2) ; // 24 ✓
46



127



4

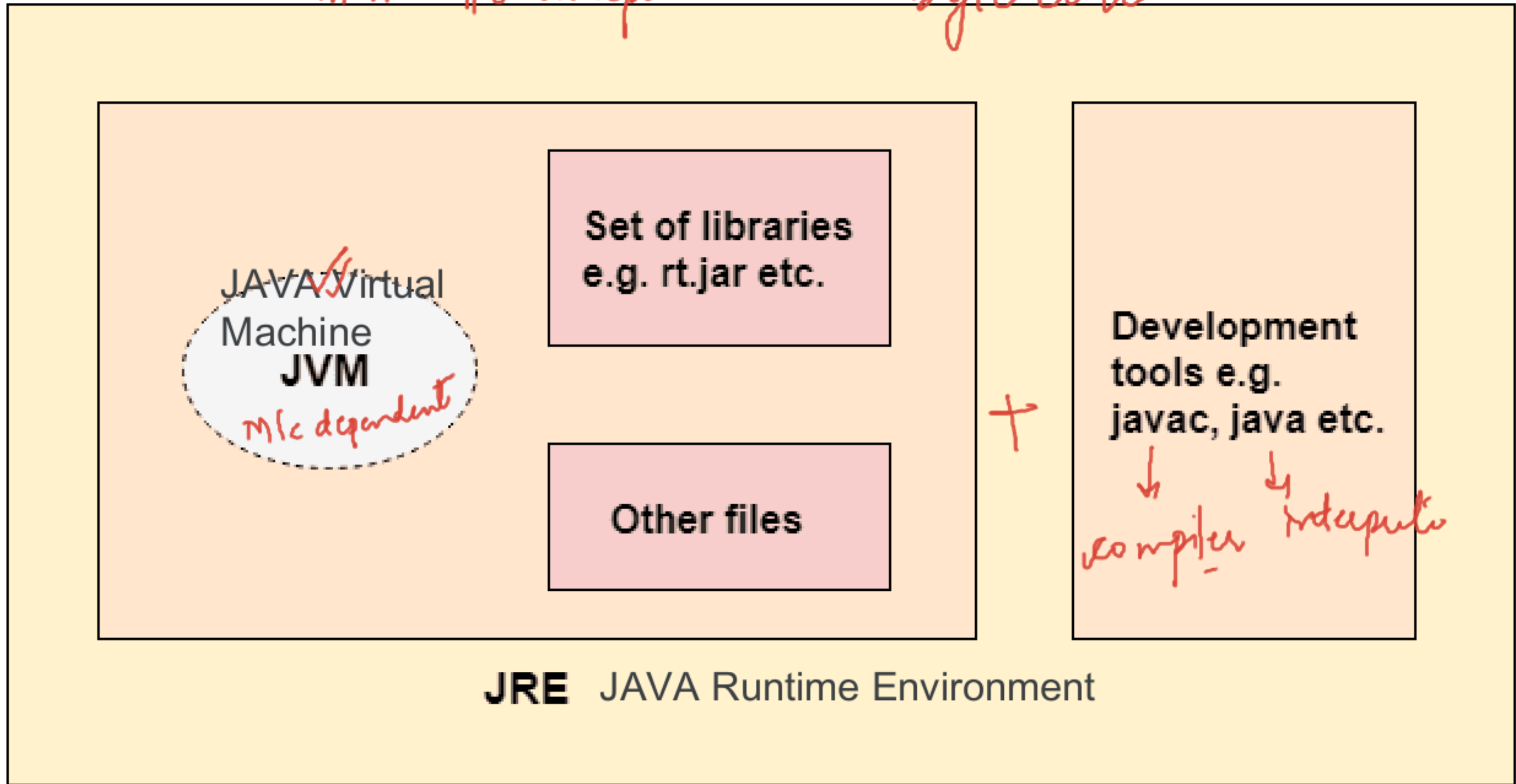
Binary →

0 1 0 0

0 - 127 → 128

1

JAVA - M/c independent → Byte code



JAVA Development KIT **JDK** → MAC, LINUX, windows

JAVA S/W run →

JDK ? or JRE ?



development

if you don't want to

develop the code, only
execution

Precedence	Operator	Operand type	Description
1	++,	Arithmetic	Increment and decrement
1	+, -	Arithmetic	Unary plus and minus
1	~	Integral	Bitwise complement
1	!	Boolean	Logical complement
1	(type)	Any	Cast
2	*, /, %	Arithmetic	Multiplication, division, remainder
3	+, -	Arithmetic	Addition and subtraction
3	+	String	String concatenation
4	<<	Integral	Left shift
4	>>	Integral	Right shift with sign extension
4	>>>	Integral	Right shift with no extension
5	<, <=, >, >=	Arithmetic	Numeric comparison
5	instanceof	Object	Type comparison
6	==, !=	Primitive	Equality and inequality of value
6	==, !=	Object	Equality and inequality of reference
7	&	Integral	Bitwise AND
7	&	Boolean	Boolean AND
8	^	Integral	Bitwise XOR
8	^	Boolean	Boolean XOR
9		Integral	Bitwise OR
9		Boolean	Boolean OR
10	&&	Boolean	Conditional AND
11		Boolean	Conditional OR
12	?:	N/A	Conditional ternary operator
13	=	Any	Assignment

String
+

Concatenation
"Testing" + (123 + 458)
addition

Testing 123458

value
"Sum of" + a + " and " + b

Arithmetic op
addition

+
123 + 1 + "String"
124 String

$\frac{\quad}{\quad}$
divide $\rightarrow \textcircled{Q}$

$4/2$ ✓
 $d \uparrow$ $\textcircled{2} \rightarrow \textcircled{Q}$
 $2 \overline{) 4}$
 4
 $\underline{\quad}$
 $0 \rightarrow \text{Rem.}$

$\frac{0}{1} \rightarrow R$
Modulons

$4/2$

$2 \overline{) 4}$

4

$\underline{\quad}$
 $\textcircled{0} \rightarrow R$

$2 \overline{) 5}$
 10
 $\underline{\quad}$
 $1 \rightarrow \textcircled{1}$

$11/2$
 $\textcircled{5.5}$
 $2 \overline{) 11}$
 10
 $\underline{\quad}$
 10
 $\underline{\quad}$
 0
 $\underline{\quad}$

$\text{int } s = 11/2$

$s = 5$
 $\text{doubled} = \underline{\underline{5.0}}$

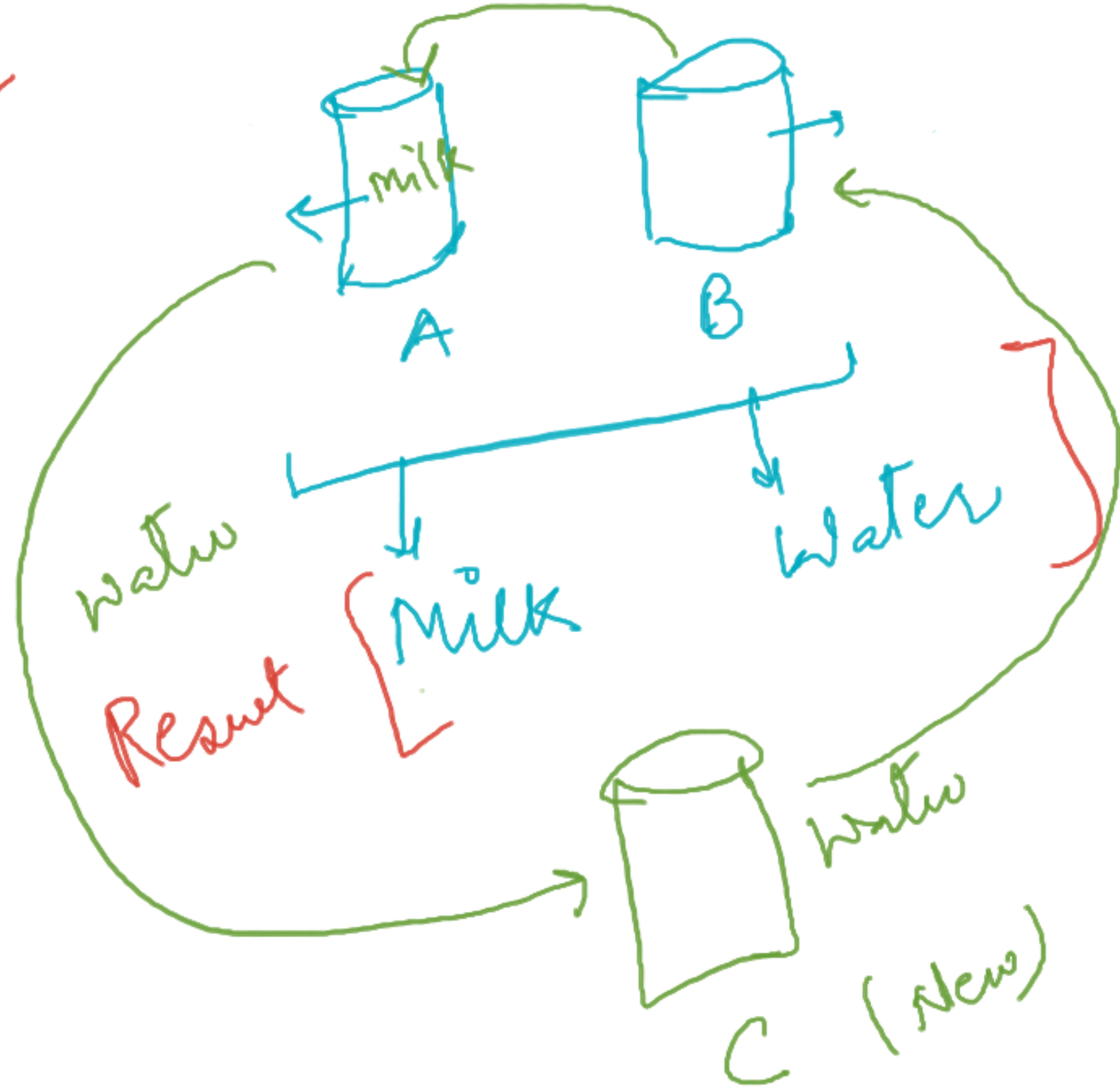
1. whether Num is Even or odd?
2. reverse of a number?
3. number is pallindrom or not?
4. Armstrong or not?
5. Swapping of number

1. Swapping of a number

$a = 12$
 $b = 4$

$a = 4$
 $b = 12$

int c;
 $c = a;$
 $a = b;$
 $b = c;$



Reverse of Number :-

$$\rightarrow 21 \quad | \quad 133 \rightarrow 331$$

$$\rightarrow 0/p \rightarrow 12$$

Logic

$$\text{St L. } 21 \cdot / \cdot 10 \rightarrow 1$$

$$\text{fd} = 21 \cdot / \cdot 10 ; // \underline{1}$$

$$\text{fd } 21 / 10 ; // 2$$

"No. of" + ld + fd

$$133 \rightarrow 331$$

$$467 \rightarrow 764$$

$$46 \text{ (7)}$$

$$10 \sqrt{21}$$

$$\text{(1)} \rightarrow R$$

← [Tue - Sunday] →
[8:30 AM IST]
↓ ↓ 8 PM
9:30

$$10 \sqrt{133}$$

$$10 \sqrt{33}$$

$$30$$

$$\text{(3)}$$



$s1: 234 \cdot 10 \rightarrow \textcircled{4}$

$n = 234 / 10 \rightarrow \underline{23}$

second digit

$r2 = n \cdot 10$

$r3 = n / 10$

$\rightarrow \textcircled{3} \checkmark$

$\rightarrow \textcircled{2}$

(Rev of No 'es' + $r1 + r2 + r3$)

$23 \cdot 10 \rightarrow \textcircled{3}$

(1) ~~23~~ $\rightarrow Q$
 $10 \overline{) 234} \rightarrow 23$

$\underline{20}$
 34
 $\underline{30}$

$\cdot 10 \quad 4 \rightarrow R$


```
1 package
2
3 public class ReverseNumber {
4
5     public static void main(String[] args) {
6         int n = 456;
7
8         int rem1 = n % 10; // 172%10-->2 → 6
9
10        // n = n/10; // 172/10 ---> 17 45
11        int rem2 = n%10; // 17%10-->7
12
13        int rem3 = n/10;
14
15        System.out.println("Reverse of a number is-" + rem1+rem2+rem3);
16
17    }
18
19 }
20
21
22
23
```

Handwritten notes on the right side of the code editor:

- A red box around the number 45 with a question mark.
- A blue calculation: $10 \overline{)456}$ with 40 below 456 and 56 below 40.
- A red circle around the number 6 with a checkmark.
- A blue calculation: $10 \overline{)45}$ with 40 below 45 and 5 below 40.
- A purple calculation: $n = 456$ with 45 above 56.

Handwritten note: $45/10 \rightarrow 4$

Handwritten note: 6 5 4

Handwritten note: A circle containing the number 654 with arrows pointing to each digit.

Handwritten note: A red calculation: $10 \overline{)45}$ with 40 below 45 and 5 below 40.