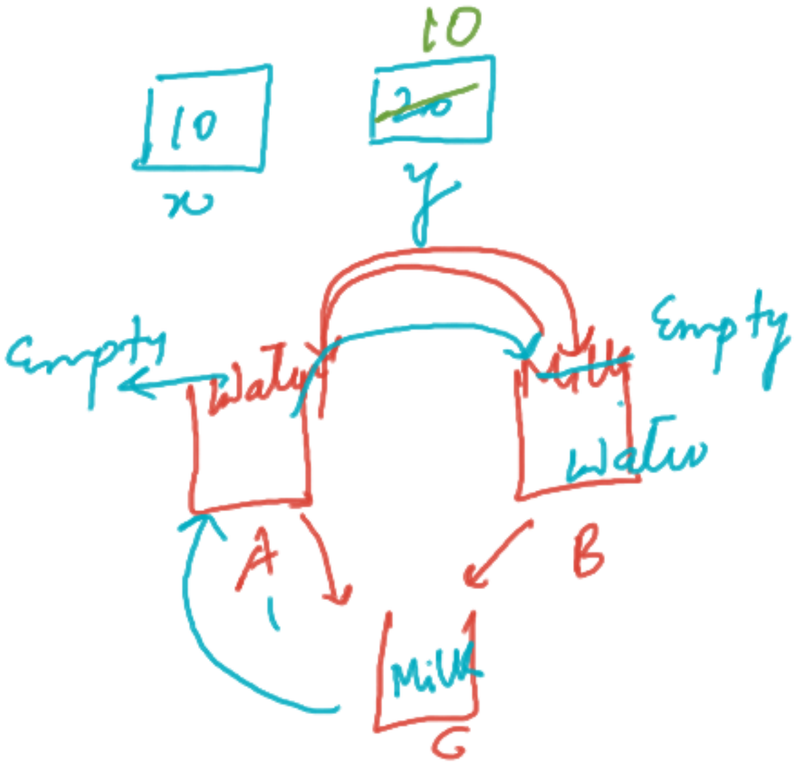
① using Third Variable – Swapping of Numbers.

```
int x = 10;
int y = 20;
int z = x; // 10
x = y; // x = 20;
y = z; // y = 10;

Syso(x);
Syso(y);
```



(II) without using third variable.

```
int x = 10;
int y = 20;
x = x + y;
y = y - x;
x = x - y;
Syso(x);
Syso(y);
```

20 30 10

y = y - x; 20 - 10; 10

x = x - y; // 30 - 10 =

Case1. If className & FileName is different without using public keyword.

Test.java

```
class First {

}
```

```
class First{
    public static void main(String[]
args){
        System.out.print("Different
className and FileName without
public keyword");
    }

}
```

Case2:. Class Name and FileName is Same without using public keyword.

First.java

class First {

}

```
class Code{
    public static void main(String[] args){
        System.out.print("Same className and
FileName without using public keyword");
    }

}
```

Case 3:- Class Name & FileName is different using public Keyword infront of class

Code.java

```
public class First {

}
```

```
error: class First is public, should
be declared in a file named
First.java
public class First{
       ^
1 error
```

Case4 : if class is public, Then it's mandatory to keep the fileName Name same as class Name.

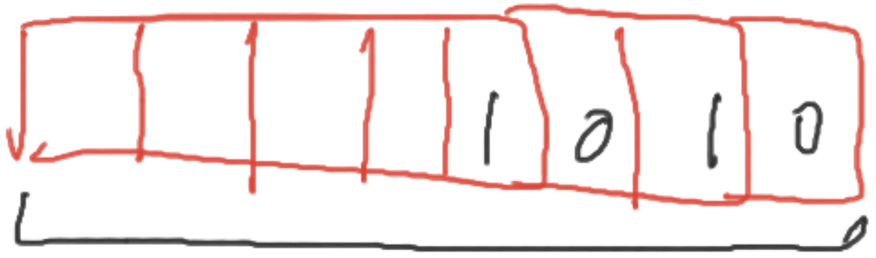
First.java

```
public class First {

}
```

```
public class Code{
    public static void main(String[]
args){
        System.out.print("Same
className and FileName with
public keyword");
    }

}
```

byte b = 10;

127



binary

8 4 2 1

1 0 1 0

128 64 32 16 8 4 2 1

```
public class PrintingStatements{
    public static void main(String[] args){
        int a=10;
        int b=20;
        System.out.println("Value of a is - a");
        System.out.println("Value of a is -" + a);
        System.out.println("Value of a and b is -" + a+b);
        System.out.println(a+b + "Value is");
        System.out.println("Value of a and b is -" + (a+b));
        System.out.println((a+b) + "Value is");
        System.out.println("Value of a is -"+ a + " and Value of b is- "+b);
    }

}
```

Addition
10+20
30

Concatenate

// Value of a is - a
// Value of a is - 10
// Value of a and b is - 1020
// 1020 Value is
// Value of a and b is - 30
// 30 value is

Value of a is - 10 and value of b is - 20

```java
public class PrintingStatements{
    public static void main(String[] args){
        int a=10;
        int b=20;
        System.out.println("Value of a is - a");
        System.out.println("Value of a is -" + a);
        System.out.println("Value of a and b is -" + a+b);
        System.out.println(a+b + " Value is");
        System.out.println("Value of a and b is -" + (a+b));
        System.out.println((a+b) + "Value is");
        System.out.println("Value of a is -"+ a + " and Value of b is- "+b);
    }

}
```

```
C:\Windows\System32\cmd.exe

E:\students_data\2023_batch\java>javac PrintingStatements.java

E:\students_data\2023_batch\java>java PrintingStatements
Value of a is - a
Value of a is -10
Value of a and b is -1020
30Value is
Value of a and b is -30
30Value is
Value of a is -10 and Value of b is- 20

E:\students_data\2023_batch\java>
```