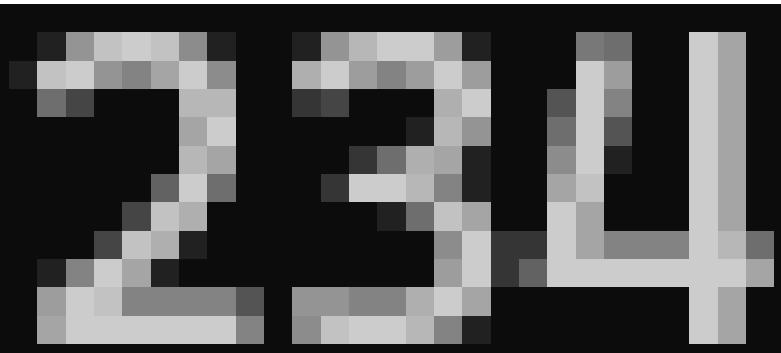
```
import java.util.*;

public class Main{

    public static void main(String[] args){


        Scanner sc=new Scanner(System.in);


            long x=sc.nextLong();


            if(x>=-128 && x<=127) {System.out.println("* byte");}

            if(x>=Short.MIN_VALUE && x<=Short.MAX_VALUE){System.out.println("* short");}

            if(x>=Integer.MIN_VALUE && x<=Integer.MAX_VALUE){System.out.println("* int");}

            if(x>=Long.MIN_VALUE && x<=Long.MAX_VALUE){System.out.println("* long");}

    }

}
```

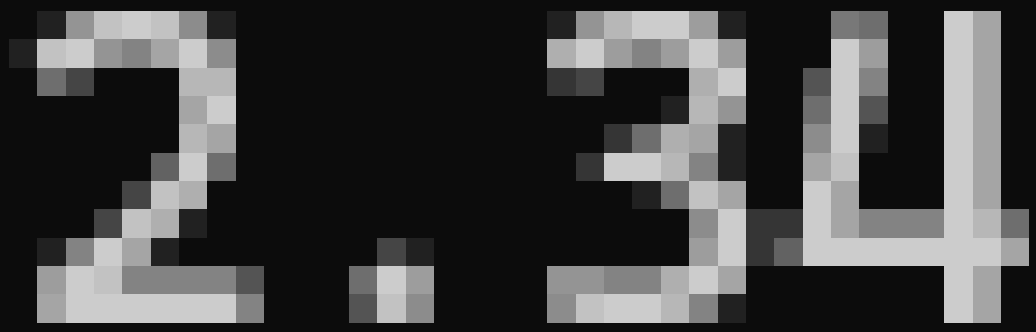
Algorithm

4

* byte
* short
* int
* long

```
import java.util.Scanner;
public class Cents{
    public static void main(String[] args) {
        Scanner sc= new Scanner(System.in);
        int cents=sc.nextInt();
        double dollars=cents/100.0;
        System.out.println(String.format("%.2f",dollars));
    }
}
```





```java
import java.util.Scanner;
public class ScoreConversion{
    public static void main(String[] args) {
        Scanner sc= new Scanner(System.in);
        double score=sc.nextDouble();
        int newScore=(int) score;
        System.out.println(newScore);
    }
}
```


345
345

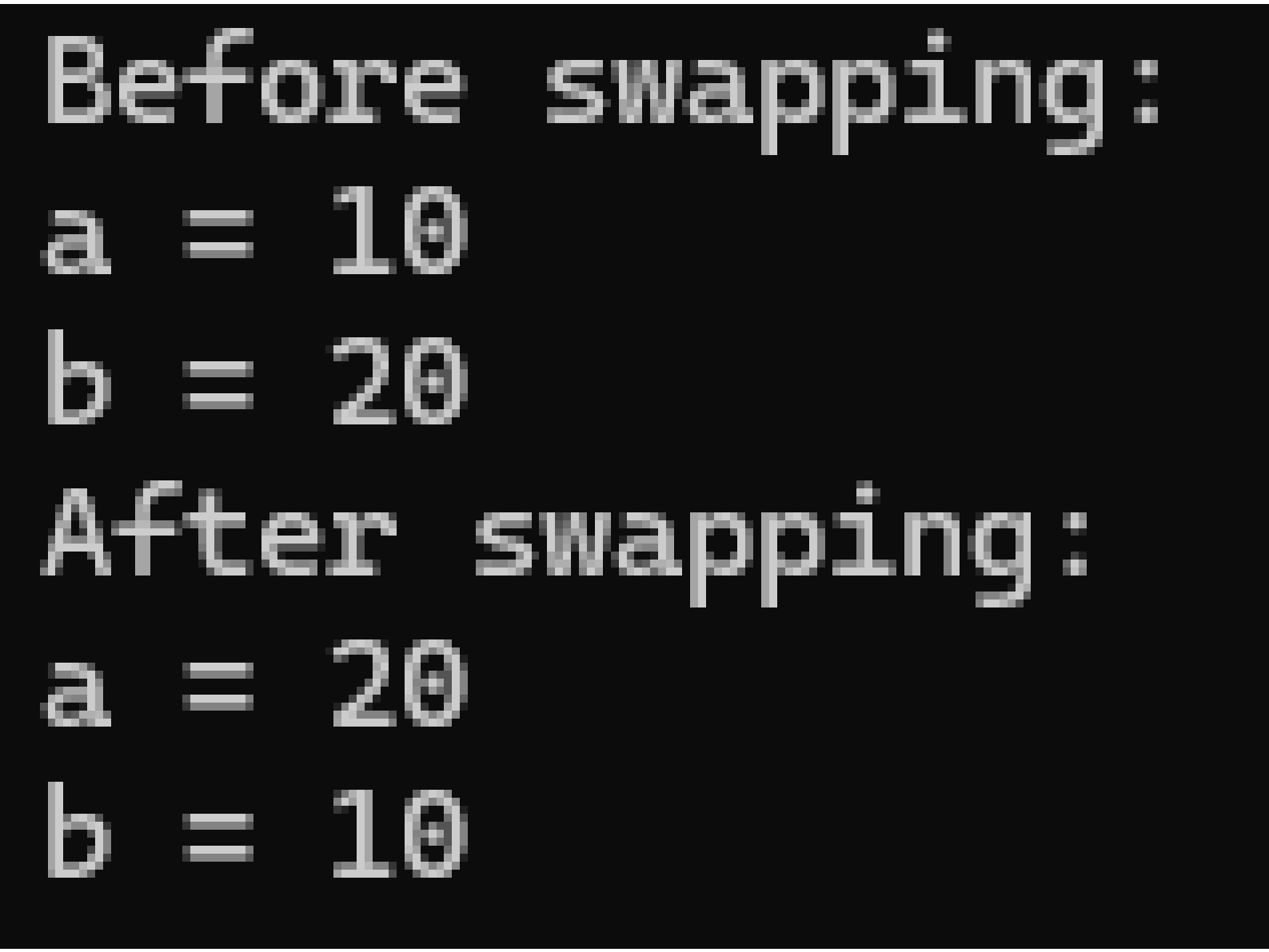
```
import java.util.Scanner;
public class SalaryHike{
    public static void main(String[] args) {
        Scanner sc= new Scanner(System.in);
        int salary=sc.nextInt();
        double hike=sc.nextDouble();
        double newSal=salary + (hike/100 * salary);
        System.out.println(String.format("%.1f", newSal));
    }
}
```


456.89
456

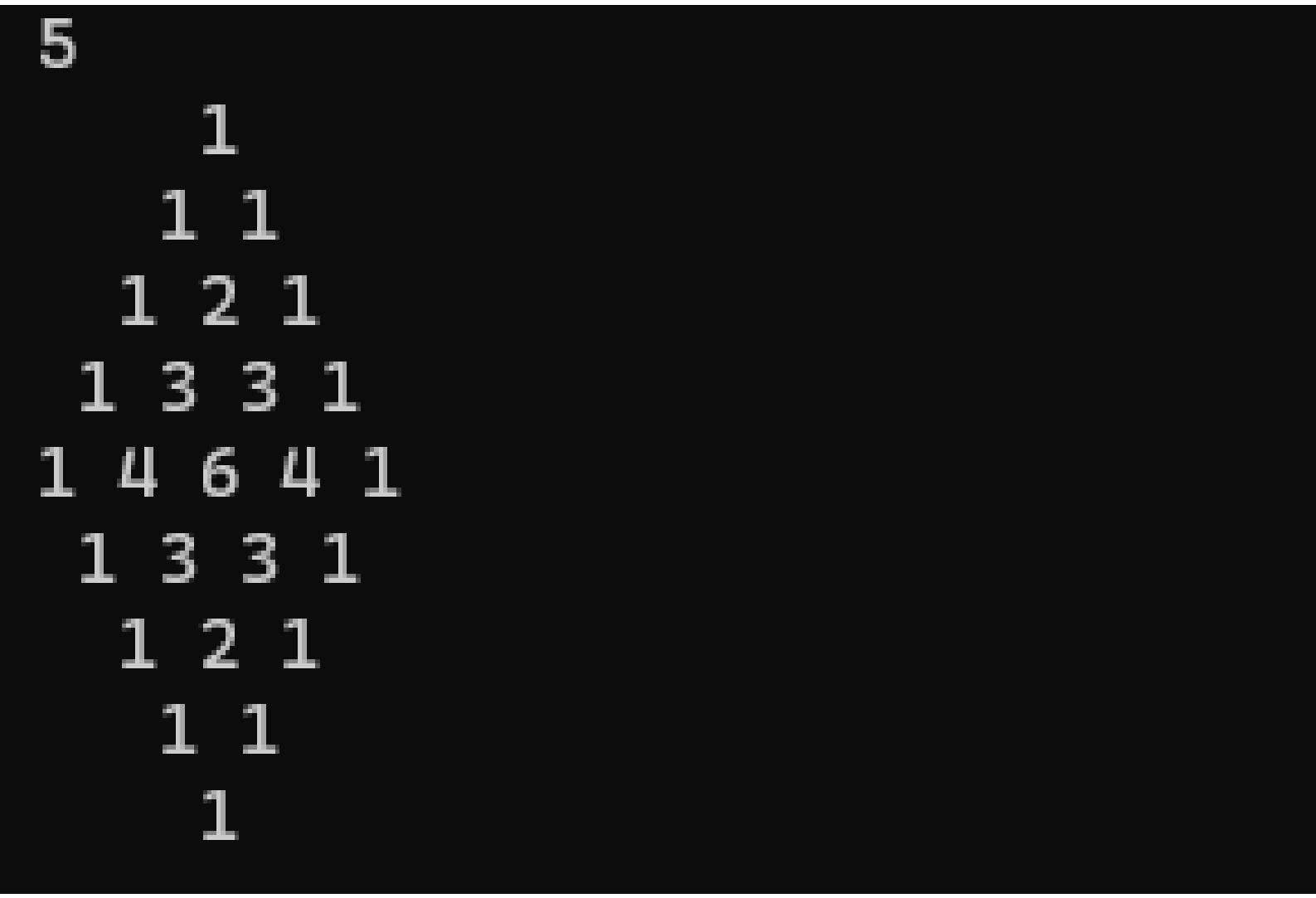
```java
import java.util.Scanner;
public class RevNum{
    public static void main(String[] args) {
        Scanner sc= new Scanner(System.in);
        int num=sc.nextInt();
        int copy=num;
        int rev=0;
        while(copy != 0){
            int d=copy % 10;
            rev=(rev * 10) + d;
            copy = copy /10;
        }
        if(rev==num) System.out.println("The reversed number is "+rev+". It is same as the original.");
        else System.out.println("The reversed number is "+rev+". It is not the same as the original.");
    }
}
```

```
4563
The reversed number is 3654. It is not the same as the original.
```

```
public class SwapNumbers {
    public static void main(String[] args) {
        int a = 10;
        int b = 20;
        System.out.println("Before swapping:");
        System.out.println("a = " + a);
        System.out.println("b = " + b);
        int temp = a;
        a = b;
        b = temp;
        System.out.println("After swapping:");
        System.out.println("a = " + a);
        System.out.println("b = " + b);
    }
}
```


Before swapping:
a = 10
b = 20
After swapping:
a = 20
b = 10

```java
import java.util.Scanner;

public class NumberPattern {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        int n = scanner.nextInt();
        for (int i = n; i > 0; i--) {
            for (int j = 1; j <= i; j++) {
                System.out.print(j + " ");
            }
            System.out.println();
        }

        scanner.close();
    }
}
```


5
1
1 1
1 2 1
1 3 3 1
1 4 6 4 1
1 3 3 1
1 2 1
1 1
1

```java
import java.util.Scanner;
public class RevNum{
    public static void main(String[] args) {
        Scanner sc= new Scanner(System.in);
        int num=sc.nextInt();
        int copy=num;
        int rev=0;
        while(copy != 0){
            int d=copy % 10;
            rev=(rev * 10) + d;
            copy = copy /10;
        }
        if(rev==num) System.out.println("The reversed number is "+rev+". It is same as the original.");
        else System.out.println("The reversed number is "+rev+". It is not the same as the original.");
    }
}
```

```
4563
The reversed number is 3654. It is not the same as the original.
```