## King Saud University College of Computer and Information Sciences Computer Science Department CSC 111 First Semester Introduction to Programming with Java 1440-1441

## self-checked sheet: Conditional statements

1- Write a Java program that reads a floating-point number and prints "zero" if the number is zero. Otherwise, print "positive" or "negative". Add "small" if the absolute value of the number is less than 1, or "large" if it exceeds 1,000,000.

```
Example:
Input a number: 25
Expected Output:
Input value: 25
Positive number
4
           Scanner input = new Scanner(System.in);
 5
             System.out.println("Enter a number:");
           double num = input.nextDouble();
 6
            1 if (num == 0)
 7
              — System.out.println("zero");
 8
 9
             if(num>0){
              \langle \rangle_1 if (\text{num} < 1)
10
                 — System.out.println("small positive number");
11
12
                ¬else if(num>1000000)
                  - System.out.println("large positive number");
13
14
                else
15
                  - System.out.println("positive number");
16
17
             if (num<0) {
18
              \langle \rangle_{1} if (num*-1<1)
19
                 — System.out.println("small negative number");
20
               \langle \rangle_1 else if(num*-1>1000000)
                 — System.out.println("large negative number");
21
22
                 — System.out.println("negative number");
23
24
```

selection and Loop 1

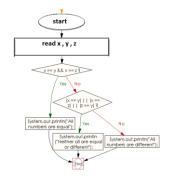
## King Saud University College of Computer and Information Sciences Computer Science Department CSC 111 First Semester Introduction to Programming with Java 1440-1441

2- Write a java program to generate a following triangle.

```
start
Example:
Input the number: 6
Expected Output:
                                                    System.out.print(* ");
4
             Scanner input = new Scanner (System.in);
 5
             System.out.println("Enter a number: ");
           int num = input.nextInt();
 6
 7
             for(int i = 0 ; i <= num; i++) {</pre>
                for (int m = 0 ; m < num-i; m6++) {</pre>
 8
 9
                    System.out.print(" ");
10
11
                 for(int j = 0; j < i; j++)  {
12
                    System.out.print("*");
13
14
                System.out.println();
15
```

3- Write a Java program that accepts three numbers and prints "All numbers are equal" if all three numbers are equal, "All numbers are different" if all three numbers are different and "Neither all are equal or different" otherwise.

```
Example:
Input first number: 2564
Input second number: 3526
Input third number: 2456
All numbers are different
```



selection and Loop 2

## King Saud University College of Computer and Information Sciences Computer Science Department CSC 111 First Semester Introduction to Programming with Java 1440-1441

```
Scanner input = new Scanner (System.in);
System.out.println("Enter three numbers ");
int x= input.nextInt();int y= input.nextInt();int
z=input.nextInt();
if (x==y&&y==z)
System.out.println("all numbers are equal");
else if (x==y||y==z||x==z)
System.out.println("neither all are equal or different");
else
System.out.println("all are numbers are different");
```

4- Write a program that accepts three numbers from the user and prints "increasing" if the numbers are in increasing order, "decreasing" if the numbers are in decreasing order, and "Neither increasing or decreasing order" otherwise.

start

read x , y , z

x < y && y < z ?

x > y && y > z ?

```
Example
Input first number: 1524
Input second number: 2345
Input third number: 3321
Expected Output:
Increasing order
```

```
Scanner input = new Scanner (System.in);
System.out.println("Enter three numbers ");
int x = input.nextInt(); int y =
input.nextInt(); int z = input.nextInt();
if (x<y&&y<z)
System.out.println("increasing");
else if (x>y&&y>z)
System.out.println("decreasing");
else
System.out.println("neither");
```

selection and Loop 3