1. Write a Java program printing “Hello World!”
2. Write a Java program printing integers (1 < n < 100) divisible by 3 and 5.
3. Write a Java program to break an integer into a sequence of individual digits.

Test Data  
Input six non-negative digits: 123456  
Expected Output  
1 2 3 4 5 6

1. Write a program in Java to display the pattern below.

Test Data  
Input number of rows : 5  
Expected Output :

1

12

123

1234

12345

1. Write a program in Java to display the multiplication table of a given integer.   
   Expected Output

5 X 0 = 0

5 X 1 = 5

5 X 2 = 10

5 X 3 = 15

5 X 4 = 20

5 X 5 = 25

…

1. Define a Class ***PointBasic*** describing a point on a 2D space (double x, y).
2. Define a Class ***Point*** describing a point on a 2D space (double x, y) and allowing the user to read and write the state of the point while keeping its attributes protected (public methods **getX(), getY(), setX(), setY()**).
3. Write a Java program printing the distance between 2 objects of class Point.
4. Define a Class ***CircleBasic*** describing a circle on a 2D space (double x, y, r).
5. Write a Java program verifying if a Point object is inside a CircleBasic object.
6. Define a Class ***Circle*** describing a circle on a 2D space (double x, y, r). The class must have a method **isInside(Point p)** returning true if Point p is inside the circle, false otherwise.
7. Write a java program to get the length of a String object.
8. Write a Java program to print a String object in reverse order.
9. Write a Java program to convert all the characters in a string to lowercase.
10. Write a Java program to find the shortest String of an array (String).
11. Write a Java program to reverse the order to elements of an array (String).
12. Write a Java program to find the index of an element in an array (String).
13. Write a Java program to find duplicate values of an array (String).
14. Write a Java program to test the equality of two arrays (String).
15. Write a Java Class ***StringProcessor*** combining the functionalities of exercises 15 – 19. In particular, each functionality is represented by a class method. Furthermore, the user must be able to add or remove String objects from the array.