Practice Set 1 – Simple Java Programs

These are 5 very simple programs to get you familiarized with the Java syntax. Function/method usage is not required. But it is up to you if you want to use functions (self-study).

1. Write a program that accepts the final grade of a student and then displays its grade point equivalent based on the following table:

Final Grade	GPE
< 60	0.0
60 – 65.999	1.0
66 – 71.999	1.5
72 – 77.999	2.0
78 – 82.999	2.5
83 – 88.999	3.0
89 – 93.999	3.5
94 – 100	4.0

Sample Run

Enter final grade: 95.5	Enter final grade: 79.0
GPE: 4.0	GPE: 2.5

2. Create a program that will ask for an integer from 1-99 and display its Roman numeral equivalent. HINT: You can use a switch statement in Java too!

Sample Run

Input: 5	Input: 18	Input: 54	
Output: V	Output: XVIII	Output: LIV	

3. Create a program that will accept two integers and then displays the Greatest Common Factor (GCF) of the two numbers.

Sample Run

Input n1: 7
Input n2: 14
Input n2: 13
Input n2: 12
GCF: 7
Input n2: 13
Input n2: 12
GCF: 6

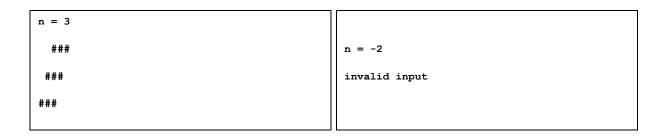
4. Write a program that will compute for the factorial of a number entered by the user. The formula for factorial is:

$$n! = \begin{cases} 1 & n = 0 \text{ or } 1\\ 1 \cdot 2 \cdot 3 \dots (n-1)(n) & \text{otherwise} \end{cases}$$

Sample Run

5. Write a program that will display the pattern below based on the integer value n entered by the user

Sample Run



n = 5	
####	
####	n = 2
####	##
####	##
