King Saud University
College of Computer & Information Science
CSC111 – Assignment 6
All Sections

Instructions

1. *__Due date: Sunday, October 17th, 2021 at 11:00 pm__*
2. You can discuss answers with your colleagues, but **cheating is prohibited and there will be extreme consequences**.
3. Submit it to email CSC111LAB@gmail.com
4. All classes in one java project.
5. The subject of email must be *__ID Name Day Time Assignment#__*
   For example: **443123456 Mohammed Fahad SUN 1-3 Assignment1**
6. Use the default package.

Question 1

Write a program that prompts the user to enter an integer and displays a pyramid, as shown in the following sample run:

```
Enter the number of lines: 5 ↵
                1
            2   1   2
        3   2   1   2   3
    4   3   2   1   2   3   4
5   4   3   2   1   2   3   4   5
```

This is how the spaces look like:
□□□□□□□□□□□□□□□**1**
□□□□□□□□□□□**2**□□**1**□□**2**
□□□□□□□□**3**□□**2**□□**1**□□**2**□□**3**
□□□□□**4**□□**3**□□**2**□□**1**□□**2**□□**3**□□**4**
□□**5**□□**4**□□**3**□□**2**□□**1**□□**2**□□**3**□□**4**□□**5**

```
Enter the number of lines: 3 ↵
        1
    2   1   2
3   2   1   2   3
```

This is how the spaces look like:
□□□□□□□□**1**
□□□□□**2**□□**1**□□**2**
□□**3**□□**2**□□**1**□□**2**□□**3**

1. There are two spaces between every two digits and before the first digit on the last line (two spaces before digit 5)
2. Each line ends with a digit (no spaces after the last digit)

Name your class **Pyramid**.

Question 2

Write a program that breaks a number into its digits. The program keeps prompting the user to enter an integer and displays the digits of that integer until the user enters -1.

Name your class **Digits**.

Here is a sample run:

```
Enter a number (-1 to end): 3457 ↵
Digit1 = 7
Digit2 = 5
Digit3 = 4
Digit4 = 3
Enter a number: 23 ↵
Digit1 = 3
Digit2 = 2
Enter a number: 847570 ↵
Digit1 = 0
Digit2 = 7
Digit3 = 5
Digit4 = 7
Digit5 = 4
Digit6 = 8
Enter a number: -1 ↵
```