

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

Question 1

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

<pre>Enter the number of lines: 5 ↵ 1 2 1 2 2 2 1 2 3 2 3 2 1 2 3 4 2 4 3 2 1 2 3 4 5</pre>	<p>This is how the spaces look like:</p> <pre>□□□□□□□□□□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</pre>
<pre>Enter the number of lines: 3 ↵ 1 2 1 2 2 2 1 2 3</pre>	<p>This is how the spaces look like:</p> <pre>□□□□□□□1 □□□□2□1□2 □□3□2□1□2□3</pre>

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 ↵
```