National University of Computer and Emerging Sciences, Lahore Campus

	Course Name:	**Programming Fundamentals**	**Course Code:**	**CL 118**
	Program:	**BS(CS)**	**Semester:**	**Fall 2018**
	Duration:	**1.30 hrs.**	**Total Points:**	**40**
	Paper Date:	**Thursday, 25th Oct 2018**	**Weight**	**25**
	Section:	**A & B**	**Page(s):**	**2**
	Exam Type:	**Lab Mid**		

Instruction/Notes: Taking some illegal online/offline help (i.e. cheating) might earn you an **F** grade in the entire course.

Question 1: [15 marks]

Write a program that takes as input a number from 1-100, and prints its value in English.

Sample example
Input: 8
Output: eight

Input: 92
Output: ninety two

Note: This question is a time trap! ;) Don't spend more than 30 minutes on this question.

Question 2: [15 marks]

Given a sorted array and a number x, find the pair in array whose sum is closest to x

For Example:

Input:
myArray: 1 4 5 6 2 12 25
X : 10
Output:
The pair of elements in array which has sum value closest to X is (4,5)

Input:
myArray: 1 4 5 6 2 12 25
X : 7
Output:
The pair of elements in array which has sum value closest to X is (1,6)

Question 3: [10 marks]

Write a function **SecondLargest** that repeatedly takes **integer** input from the user one at a time until the user enters -1, and returns the second largest element. Write the main program that prints the second largest element according to the format given in example. (Note the double quotes in the output).

Sample Example:

Example 1
Input:
4
55
3
6
-1

The "second largest" element is "6".

Example 2
Input:
-1

There is no "second largest" element.

GOOD LUCK ☺