Program in Python

BBM103 Introduction to Programming Lab 1
Week 6

Fall 2017
Exercises

1. Write a function that finds the \( n \)th largest element of the given list.

   Input: \( L = [1,5,6,4,2] \), \( n=3 \)

   Output: 4

2. Write a function that determines if the given input string is a Palindrome or not.

   • A palindrome is a sequence of characters which reads the same backward as forward

   | RACECAR |
3. Implement the following integer functions:

- a) Function `celcius` returns the Celsius equivalent of a Fahrenheit temperature.

- b) Function `fahrenheit` returns the Fahrenheit equivalent of a Celsius temperature.

\[
F = \frac{9}{5} C + 32
\]  

*Celsius to Fahrenheit Formula*
Exercises

4. Write a function `perfect` that determines if a number given as a parameter is a perfect number or not. Use this function in a program that determines and prints all the perfect numbers between 1 and 1000.

• Perfect Number:
  • An integer number is said to be a perfect number if its factors, including 1 (but not the number itself), sum to the number. For example, 6 is a perfect number because $6 = 1 + 2 + 3$. 