DIVIDE AND CONQUER

Question 1

Your task is to write a function pow where pow(x,y) returns the value of x raised to the power of y.

*(a) Provide an implementation of **pow** that runs in linear time.*

> It is up to you how you choose to implement this

*(b) Provide an implementation of **pow** that runs in lg n time.*

> It is up to you how you choose to implement this

> Running your code at the command line should look something like this: ./lab2 x y. The output will include:
>
> Linear time: pow(x,y) = Z
> lg n time pow(x,y) = Z
>
> where Z is the numeric value corresponding to x raised to the power y.

Question 2

If it is not already the case, modify your solution from Q1 so that x can be a float, and y can be negative.

> This is a small modification. y can be assumed to always be an integer.

You should submit your solution to the D2L Dropbox for Lab 2. Please name your CPP file according to the scheme lastname_firstname_lab2.cpp.

> Here you will replace lastname and firstname with your own name.