C++ Functions Assignment

In this assignment, you will create two programs and also 5 C++ statements. Make sure that your programs are appropriately named and commented.

Program 1
A parking garage charges a $2.00 minimum fee to park for up to three hours. The garage charges an additional $.50 per hour for each hour or part thereof in excess of three hours. The maximum charge for any given 24-hour period is $10.00. Assume that no car parks for longer than 24 hours at a time. Write a program that calculate and prints the parking charges for each customer. You should enter hours parked for each customer. Your program should print the results in a neat format and should calculate and display the total of yesterday's receipts. The program should use the function calculateCharges to determine the charge for each customer.

Program 2
Write a program that uses a function. The function is integerPower(base, exponent) that returns the value of base ^{exponent}. For example, integerpower(3, 4) = 3*3*3*3. Assume that exponent is a positive, non-zero integer and that base is an integer. The function should use for or while to control the calculation. Do not use any math library functions.

Statements – put these in a word document
-   Write the statements that assign random integers to the variable n in the following ranges:
    a. $1 <= n <= 2$
    b. $1 <= n <= 100$
    c. $0 <= n <= 9$
    d. $1000 <= n <= 1112$
    e. $-1 <= n <= 1$
    f. $-3 <= n <= 11$

Print out your source code files and your word document and turn it in with this form.

Name: _____

Items	Points Possible			
	1	**2**	**3**	**4**
Number of programs that work as specified			1	2
Number of syntax errors	4-5	2-3	1	0
Number of correct statements	1	2-3	4	5
Appropriate named programs			1	2

Total points: _____ out of 16