CSC 135
Assignment #6
Point value: 30

Program due: Sec 1 ~~Wed, Oct 11~~ Friday, 10·13·00
Sec 2 Thurs, Oct 12

At Happy State University, resident students pay $155 per credit (with a maximum per semester tuition fee of $2500). Nonresident students pay a flat fee of $1000 per semester plus $345 per credit. There is no maximum per semester fee for nonresidents.

Students taking 12 or more credits are considered full-time, while those taking less than 12 credits are classified as part-time students. No student is allowed to register for more than 20 credits per semester.

Write a C++ program that prompts for and reads a student's residency status (R or N) and the number of credits (int) he/she wants to take.

The program should print the following messages:

1. The program should state the student's residency status and how many credits are being requested. (see examples below)
2. The program should then print a statement indicating whether the student has tried to register for too few credits (negative or 0), part-time, full-time, or too many credits. If the student is attempting to register for too few or too many credits, print an appropriate message suggesting he/she try again later.
3. If the student has requested a valid number of credits, print the amount due for tuition. Include a $ sign and 2 digits to the right of the decimal. Adequately label the amount. If the number of credits requested, is invalid DO NOT print this message at all.

Examples:
Input: R 10
Output: A resident student wants to register for 10 credits.
You are classified as a part-time student.
Total due: $1550.00

Input: N 19
Output: A nonresident student wants to register for 19 credits.
You are classified as a full-time student.
Total due: $7555.00

Input: R 22
Output: A resident student wants to register for 22 credits.
I'm sorry, you may not register for more than 20 credits!
Please check your schedule and try again later.

Test your program with the following data sets. (Run the program 6 times.)
R 6 N 15 N 24 R 12 N –3 R 20

NOTE: Make appropriate use of named constants (it should be easy to change fees and credit limits). The program must be run interactively.

MINIMUM PROGRAM DOCUMENTATION REQUIRED.

DESIGN DOCUMENT
Before writing this program, create a design document that illustrates the algorithm your program will use. This document should provide enough detail so that another programmer could translate your algorithm into a working program. (3 points)