```cpp
1  //
2  // Shaun Chemplavil U08713628
3  // shaun.chemplavil@gmail.com
4  // C/C++ Programming III : Intermediate Programming with Objects
5  // 151116  Raymond L.Mitchell III
6  // SavingsAccount.cpp
7  // Win10
8  // Visual C++ 19.0
9  //
10 // File contains the display member function for the SavingsAccount class
11 //
12
13 #include <iostream>
14 #include "SavingsAccount.h"
15 using std::cerr;
16
17 // Static class variable
18 double ShaunChemplavil::SavingsAccount::annualInterestRate;
19
20 void ShaunChemplavil::SavingsAccount::applyMonthlyInterest()
21 {
22     const double ANNUAL_TO_MONTHLY = 1.0 / 12.0;
23     this->savingsBalance *= (1 + this->annualInterestRate * ANNUAL_TO_MONTHLY);
24 }
25
26 void ShaunChemplavil::SavingsAccount::setAnnualInterestRate(double          ⏎
   newInterestRate)
27 {
28     const double INTEREST_RATE_TO_DEC = 0.01;
29     if (newInterestRate < 0)
30     {
31        cerr << "\nERROR: INVALID INTEREST RATE!\n";
32        ShaunChemplavil::SavingsAccount::annualInterestRate = 0.0;
33     }
34     else
35        ShaunChemplavil::SavingsAccount::annualInterestRate = newInterestRate *    ⏎
          INTEREST_RATE_TO_DEC;
36 }
37
```