C++ Programming

from Beginner to Expert

Chapter 1 : Introduction to Computers and Programming

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Programming

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```cpp
1  // Fig . 6.4:  GradeBook . cpp
2  // Member – function  definitions  for  class  GradeBook  that
3  //  determines  the  maximum  of three  grades .
4  #include <iostream>
5  using namespace std;
6  #include "GradeBook.h" // include definition of class GradeBook
7  // constructor  initializes  courseName  with  string  supplied  as  argument ;
8  //  initializes  maximumGrade  to  0
9  GradeBook::GradeBook( string name )
10          : maximumGrade( 0 ) // this value will be replaced by the maximum  grade
11 {
12     setCourseName( name ); // validate and store courseName
13 } // end  GradeBook  constructor
14 // function  to set  the  course  name ; limits  name  to  25  or  fewer  characters
15 void GradeBook::setCourseName( string name )
16 {
17     if ( name.size() <= 25 ) // if name has 25 or fewer characters
18         courseName = name; // store the course name in the object
19     else // if name is longer  than  25  characters
20     { // set  courseName  to  first  25  characters  of  parameter  name
```

```cpp
21          courseName = name.substr( 0, 25 ); // select first 25 characters
22          cerr << "Name \"" << name << "\" exceeds maximum length (25).\n"
23              << "Limiting courseName to first 25 characters.\n" << endl;
24      } // end if...else
25 } // end  function   setCourseName
26 // function  to  retrieve  the  course  name
27 string GradeBook::getCourseName() const
28 {
29      return courseName;
30 } // end  function   getCourseName
```