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// This program declares the Square class and uses member functions to find
// the perimeter and area of the square

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#include <iostream>
using namespace std;

// FILL IN THE CODE TO DECLARE A CLASS CALLED Square. TO DO THIS SEE
// THE IMPLEMENTATION SECTION.
class Square
{
   private:
      float side;
   public:
      void setSide(float);
      float findArea();
      float findPerimeter();
      void defaultSquare();
      ~Square();

};

int main()
{
      Square box;     // box is defined as an object of the Square class
      Square box1;
      float size;     // size contains the length of a side of the square

      // FILL IN THE CLIENT CODE THAT WILL ASK THE USER FOR THE LENGTH OF THE
      // SIDE OF THE SQUARE. (This is stored in size)
      cout << "Enter The Length Of The Square >  ";
      cin >> size;


      // FILL IN THE CODE THAT CALLS SetSide.
      box.setSide(size);

      // FILL IN THE CODE THAT WILL RETURN THE AREA FROM A CALL TO A FUNCTION
      // AND PRINT OUT THE AREA TO THE SCREEN.
      float area;
      area = box.findArea();
      cout << "\nThe Area Of Your Square is " << area << endl;
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        // FILL IN THE CODE THAT WILL RETURN THE PERIMETER FROM A CALL TO A
        // FUNCTION AND PRINT OUT THAT VALUE TO THE SCREEN.
        float perimeter;
        perimeter = box.findPerimeter();
        cout << "\nThe Perimeter Of Your Square is " << perimeter << endl;
        box1.setSide(9);
    cout << "\nThe Area Of Square1 is " << box1.findArea() << endl;
    cout << "\nThe Perimeter Of Square1 is " << box1.findPerimeter() << endl;

    box.~Square();

        return 0;
}

// _____________________________________________________________________
//
// Implementation section       Member function implementation

//*************************************************
//  setSide
//
//  task:       This procedure takes the length of a side and
//              places it in the appropriate member data
//  data in: length of a side
//*************************************************

void Square::setSide(float length)
{
        side = length;
}

//*************************************************
//      findArea
//
//  task:             This finds the area of a square
//  data in:       none (uses value of data member side)
//  data returned: area of square
//*************************************************

float Square::findArea()
{
        return side * side;
```

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}

//************************************************
//      findPerimeter
//
//  task:              This finds the perimeter of a square
//  data in:       none (uses value of data member side)
//  data returned: perimeter of square
//************************************************

float Square::findPerimeter()
{
      return 4 * side;
}
void Square::defaultSquare()
{
   side = 1;
}
Square::~Square()
{
   Square *pointer = nullptr;
   delete pointer;


}
```