Week 4 Challenge

LATEST SUBMISSION GRADE

100%

1. A base class Pair contains a single constructor Pair(a,b) that initializes the pair with   **5 / 5 points**
    the two integer arguments a and b. A derived class sumPair inherits the base class
    Pair, and specializes it with a new constructor sumPair(a,b) and a new variable sum.

    Both of these classes have already been defined.

    Implement the new constructor sumPair(a,b), which was declared already in class
    sumPair. The new constructor sumPair(a,b) should initialize the inherited class Pair
    with integer values a,b and set the member variable "sum" to the sum of a and b.

```
1    /* Class Pair has already been
2     * declared and defined with the
3     * following constructor:
4     *
5     *    Pair(int,int)
6     *
7     * that stores its two arguments in
8     * two private member variables of Pair.
9     *
10    * Class sumPair has also already been
11    * defined as follows:
12    *
13    * class sumPair : public Pair {
14    * public:
15    *    int sum;
16    *    sumPair(int,int);
17    * };
18    *
19    * Implement the constructor
20    * sumPair(int,int) such that it
21    * loads the two member variables of
22    * the base Pair class with its
23    * arguments, and initializes the
24    * member variable sum with their sum.
25    */
26   sumPair::sumPair(int a, int b):Pair(a,b) {
27     sum = a+b;
28   }
29
30
31   /* Below is a main() function
37   int main() {
38     sumPair sp(15,16);
39     std::cout << "sp(15,16).sum =" << sp.sum << std::endl;
40     return 0;
41   }
```

Run

Reset

```
sp(15,16).sum =31
```