src/OrderedPair.h

```cpp
1  // Title:  OrderedPair.h
2  // Desc:   Header file for OrderedPair.cpp
3  // Name:   An Tran
4
5  #ifndef ORDEREDPAIR_H
6  #define ORDEREDPAIR_H
7
8  class OrderedPair{
9  private:
10     double xVal{0.0};
11     double yVal{0.0};
12
13  public:
14     // constructors
15     OrderedPair();
16     OrderedPair(double xVal, double yVal);
17
18     // getters
19     double getX();
20     double getY();
21
22     // setters
23     void setX(double newXVal);
24     void setY(double newYVal);
25     void setPair(double& newXVal, double& newYVal);
26
27     // element-wise arithmetic functions
28     // description: Does calculates using the object's xVal and yVals and returns it
   as a double
29     // receives:    nothing
30     // returns:     double
31     double addPair();
32     double subtractPair();
33     double multiplyPair();
34     double dividePair(); // has error check for dividing by zero
35     double powerPair();
36
37     // pair-wise arithmetic functions
38     // description: Replace target object's xVal and yVal with corresponding
   calculates of OrderPair object's x and y
39     // receives:    Reference to two OrderedPair objects.
40     // returns:     nothing
41     void addPair(OrderedPair& obj1, OrderedPair& obj2);
42     void subtractPair(OrderedPair& obj1, OrderedPair& obj2);
43     void multiplyPair(OrderedPair& obj1, OrderedPair& obj2);
44     void dividePair(OrderedPair& obj1, OrderedPair& obj2); // has error check for
   dividing by zero
45     void powerPair(OrderedPair& obj1, OrderedPair& obj2);
46
47     // other functions
48     void displayPair(); // values are expected to be to 6 decimal places
49  };
50
51  #endif
```

52