Employee.h string firstName string lastName int id · Employee() Employee(string fn, string ln, int _id) - ~Employee() + static Employee newEmployee() + void setID(int hash, int size) + bool operator==(const Employee &rhs) bool operator<(const Employee &rhs)</pre> + int getID() const + string getFirstName() const

+ string getLastName() const

```
List.h
 struct Node{}
  Node *start
 Node *stop
  Node *iterator
 int length
 int binarySearch (int low, int high, T c) const
 + List ()
+ List (const List &list)
+ ~List ()
+ T getStart () const
 + T getStop () const
+ bool isEmpty () const
 + int getLength () const
+ T getIterator () const
+ bool offEnd () const
+ bool operator==(const List &list) const
 + int getIndex () const
+ int linearSearch (T c) const
+ int binarySearch (T c) const
 void removeStart ()
 + void removeStop ()
 + void insertStart (T data)
 + void insertStop (T data)
+ void startIterator ()
 + void removeIterator ()
 + void insertIterator (T data)
 + void moveIterNext ()
+ void moveIterPrevious ()
 + void moveToIndex (int index)
 + void displayList (ostream &out) const
 vector<T> displayNumberedList (ostream &out) const
```

HashTable.h

```
static const int SIZE = 50
List<hashdata> Table[SIZE+1]
```

+ HashTable () {} + ~HashTable () {}

+ int hash (string key) const

+ int countBucket (int index) const

+ hashdata searchCustomer (hashdata c, int _in) + hashdata searchId (hashdata c, int _in)

+ void insert (hashdata u, int _in)

+ void update (hashdata u, int _in, int index) + void printTable (ostream& out) const

```
BST.h
 struct Node {}
 Node* root
 void insertModelHelper (Node* root, Product data)
 void insertBrandHelper (Node* root, Product data)
```

void inOrderPrintToFileHelper (ostream& out, Node* root) const

void destructorHelper (Node* root)

Product searchModelHelper (Node* root, Product data) const

bool searchBrandHelper (Node* root, Product value) const

Node* removeHelper (Node* root, Product data)

void getSizeHelper (Node* root, int& size) const

⊦ BST ()

BST (const BST &bst)

+ ~BST ()

+ Product minimum () const

+ bool searchBrand (Product value) const

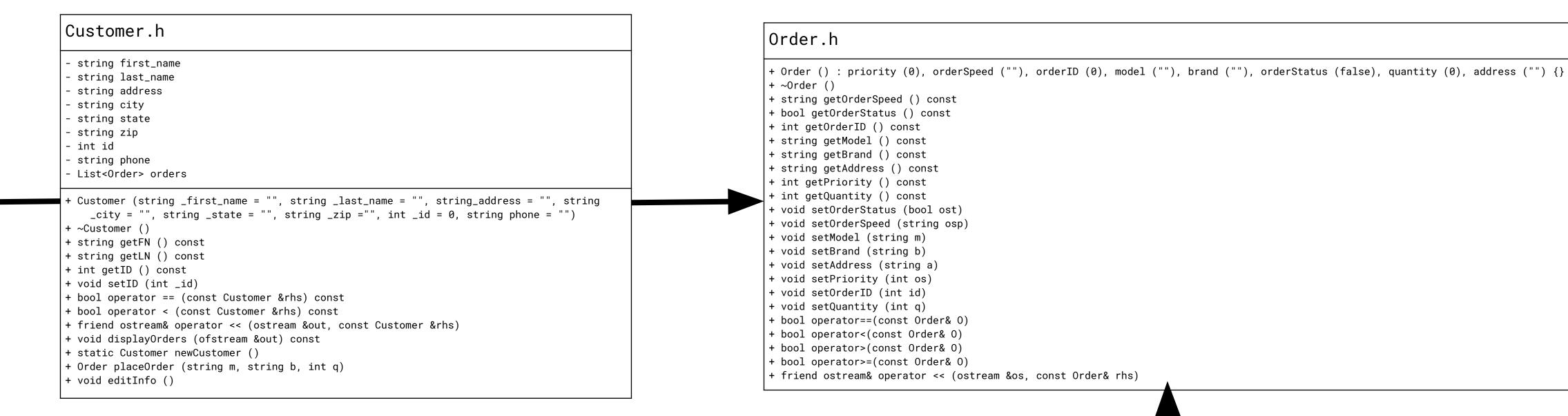
+ void insertModel (Product data)

+ vector<Product> inOrderPrint (ostream& out) const

```
Product.h

    string model

                                                                                                                 - string brand
                                                                                                                 double price
                                                                                                                 double weight
 vector<Product> inOrderPrintHelper (ostream& out, Node* root, vector<Product> &v) const
                                                                                                                 double size
                                                                                                                 · int storage
 void copyHelper (Node* copy)
                                                                                                                 - int inStock
                                                                                                                + Product() : model(""), brand(""), price(0), weight (0), size(0), storage(0), inStock(0) {}
                                                                                                                + ~Product() {}
                                                                                                                + string getModel() const
 Product minimumHelper (Node* root) const
                                                                                                                + string getBrand() const
                                                                                                                + int getInStock() const
                                                                                                                + void setModel(string _model)
                                                                                                                + void setBrand(string _brand)
                                                                                                               + void setPrice(double _price)
                                                                                                                + void setWeight(double _weight)
                                                                                                               + void setSize(double _sSize)
+ bool isEmpty () const
                                                                                                                + void setStorage(int _storage)
+ int getSize () const
                                                                                                               + void setInStock (int _inStock)
+ Product searchModel (Product data) const
                                                                                                                + static void inputDouble(bool &valid, istream &cin)
                                                                                                                + static void inputInt(bool &valid, istream &cin)
                                                                                                                + static void inputNeg(bool &valid, double d)
                                                                                                                + static void inputNeg(bool &valid, int i)
+ void insertBrand (Product data)
+ void remove (Product data)
                                                                                                                + static Product newProduct()
                                                                                                               + friend ostream& operator<<(ostream &os, const Product &x)
+ void inOrderPrintToFile (ostream& out) const
                                                                                                                + void displayProduct(ostream &out) const
```



Heap.h

int heap_size

vector<Order> *heap void heapify(int i)

void heap_increase_key(int i, Order& order)

+ Heap(vector<Order> &v)

+ void build_heap() + void queue(Order& order)

+ void dequeue()

+ void sort()

+ Order get_max() const

+ int get_parent(int i) const

+ int get_left(int i) const

+ int get_right(int i) const + int get_size() const

+ Order get_element(int i) const + void displayOrders(ostream& out) const