

The TaxFormD class is derived from the TaxForm class, and has a map that has string keys and double as the data.

```
int main(int argc, char* argv[])
{
    string SSN;
    TaxPayers payers;
    payers.read(argv[1]);
    cout << "SSN to check (0 to end) : ";
    cin >> SSN;

    while(SSN != "0")
    {
        payers.checkDeductions(SSN);
        cout << "SSN to check (0 to end) : ";
        cin >> SSN;
    } // while

    return 0;
}
```



```
[ssdavis@lect1 finalA]$ cat taxInfo.txt
592-35-1000 4390.57 Mortgage 4000.00 Medicine 250.00 Fees 140.57
332-78-4392 5012.66 Taxes 2000.00 Mortgage 3000.00
448-89-9923 300.12 Doctors 120.00 Charity 200.00
[ssdavis@lect1 finalA]$
```



```
[ssdavis@lect1 finalA]$ a.out taxInfo.txt
SSN to check (0 to end) : 592-35-1000
12345678901234567890 // Added by Sean for formatting guidance.
Fees                140.57
Medicine            250.00
Mortgage            4000.00
Total:              4390.57
Deductions OK
```



```
SSN to check (0 to end) : 332-78-4392
Mortgage            3000.00
Taxes               2000.00
Total:              5000.00
Deductions not OK
```



```
SSN to check (0 to end) : 332-78-0000
332-78-0000 not found
SSN to check (0 to end) : 448-89-9923
Charity             200.00
Doctors             120.00
Total:              320.00
Deductions not OK
```



```
SSN to check (0 to end) : 0
[ssdavis@lect1 finalA]$
```

```

class ListNode {
    TaxFormD taxFormD;
    ListNode *prev;
    ListNode *next;
    ListNode(const TaxFormD &tf, ListNode *p, ListNode *n) : taxFormD(tf), prev(p),
        next(n)
    {}
    friend class TaxPayers;
}; // class ListNode

```

```

class TaxPayers
{
    ListNode *head;
public:
    TaxPayers();
    void read(const char *filename);
    void checkDeductions(const string &SSN) const;
}; // class Taxpayers

```

```

class TaxForm
{
    string SSN;
protected:
    double deductions;
    istream& read(istream &is); // reads SSN and deductions from is.
public:
    TaxForm(const string &S, double ded);
    virtual ~TaxForm();
    virtual void check() const = 0;
    const string& getSSN()const;
}; // class TaxForm

```