

# Assignment

## Week 19

### CT103

### Programming

Lab Week Beginning 23<sup>rd</sup> March 2015

# Assignment Description (1/2)

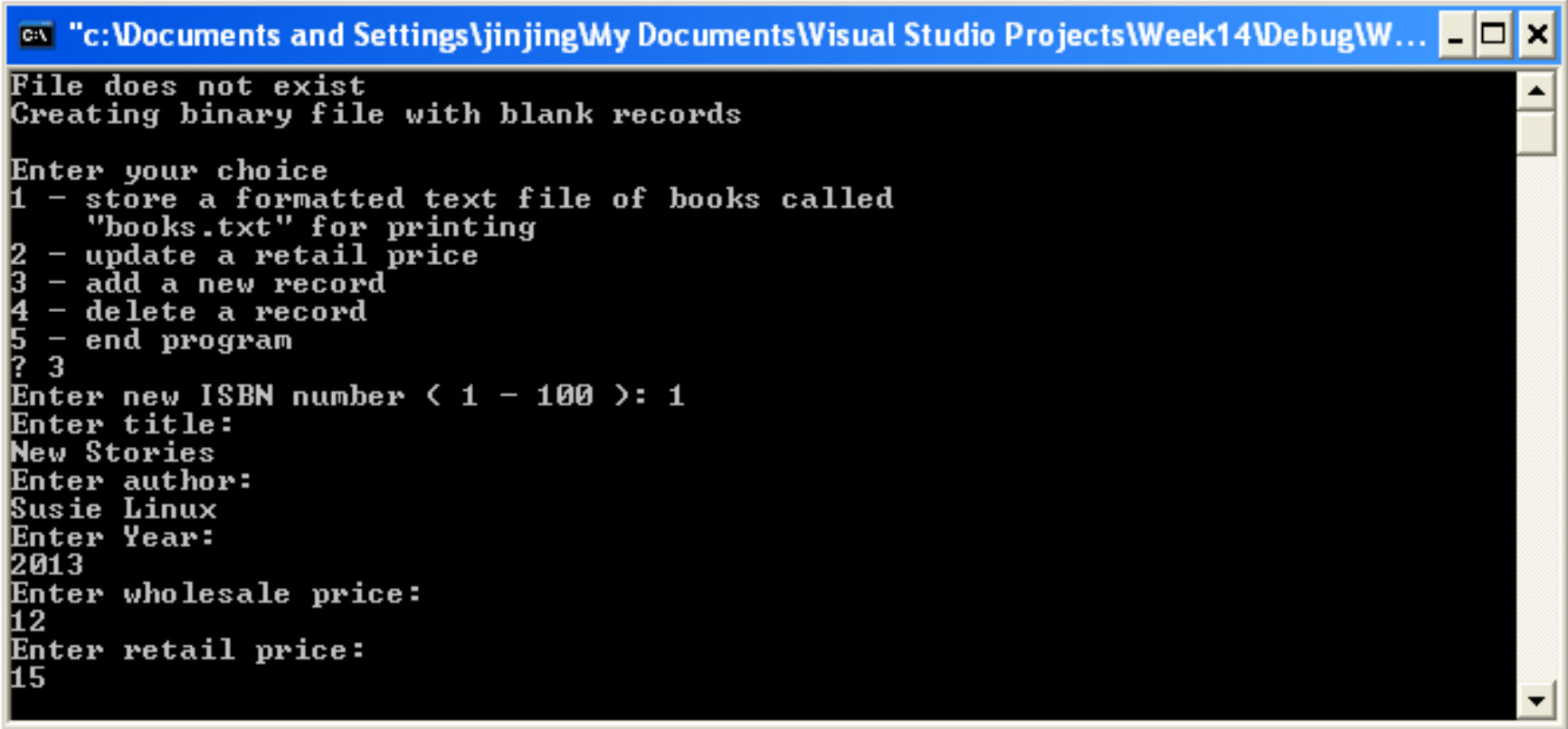
- *This week's assignment you are asked to modify an existing program*
- *Using the provided sample from Deitel & Deitel, you will modify the programs, which instead of managing a binary file of account records, it will manage a binary file containing book shop records*
- *In this program you will:*
  - *Create a binary file containing 100 'blank' book records (you may create a separate program which does this or make it a function in your main program as per the sample input / output which follows. In the sample solution I have an IF statement that creates the binary file if fopen() returns a NULL pointer.*
  - *The program reads book data from user input and saves it in the binary file*
  - *The program must also be able to retrieve records from the binary file and display them*
  - *The main functions you will perform on the book records after reading them from the binary file are:*
    - *Delete record*
    - *Add record*
    - *Update retail price*
    - *Write all non-blank records to a text file*

## Assignment Description (2/2)

- *The ISBN numbers will be 1-100 (to keep it simple for searching for records).*
- *Each book will be stored in it's appropriate block in the binary file according to its ISBN number*

```
struct book {  
    char title[20];  
    char author[20];  
    int year;  
    int ISBN;  
    float wholesale_price;  
    float retail_price;  
};
```

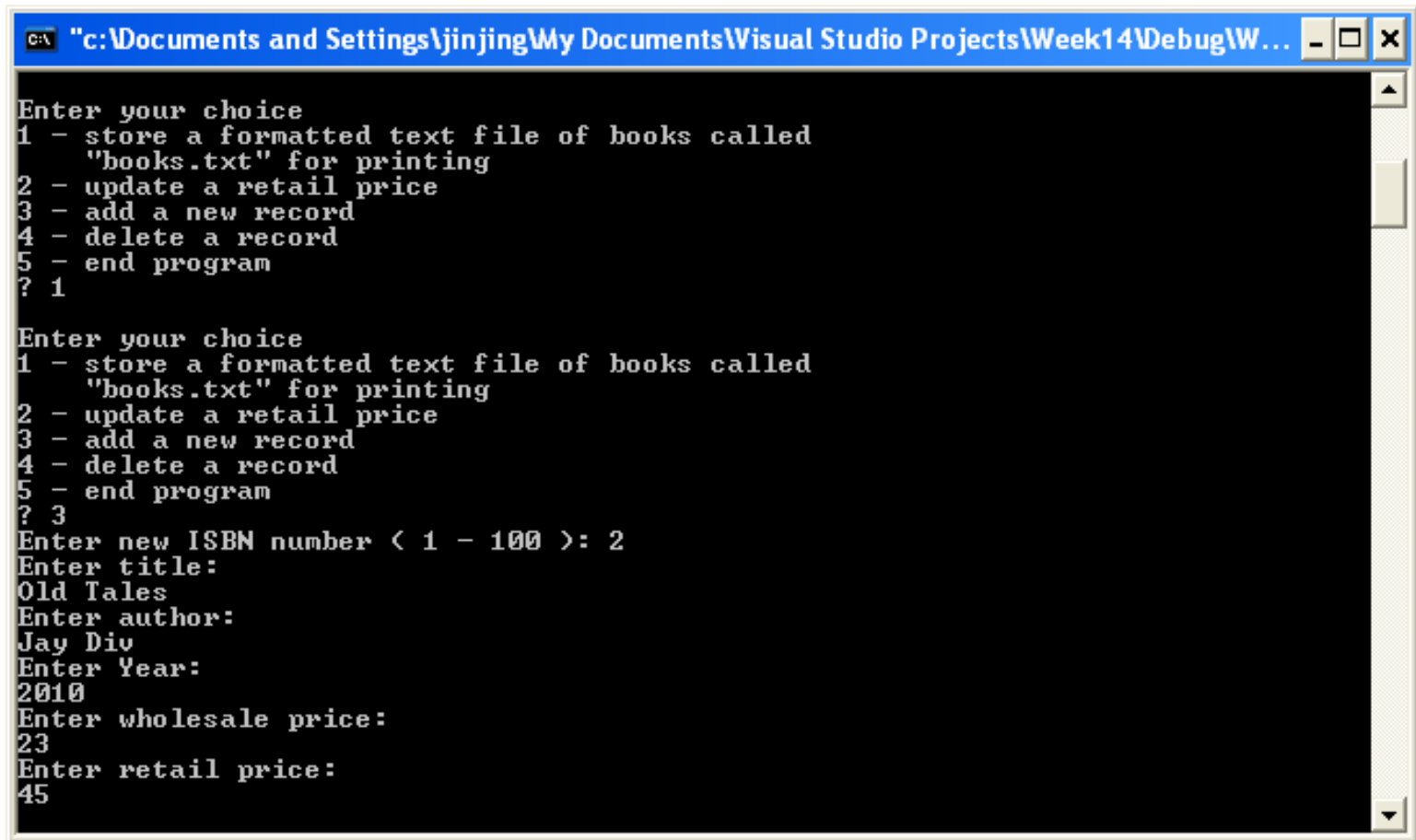
# Add Book



```
C:\ "c:\Documents and Settings\jinjing\My Documents\Visual Studio Projects\Week14\Debug\W...
File does not exist
Creating binary file with blank records

Enter your choice
1 - store a formatted text file of books called
    "books.txt" for printing
2 - update a retail price
3 - add a new record
4 - delete a record
5 - end program
? 3
Enter new ISBN number < 1 - 100 >: 1
Enter title:
New Stories
Enter author:
Susie Linux
Enter Year:
2013
Enter wholesale price:
12
Enter retail price:
15
```

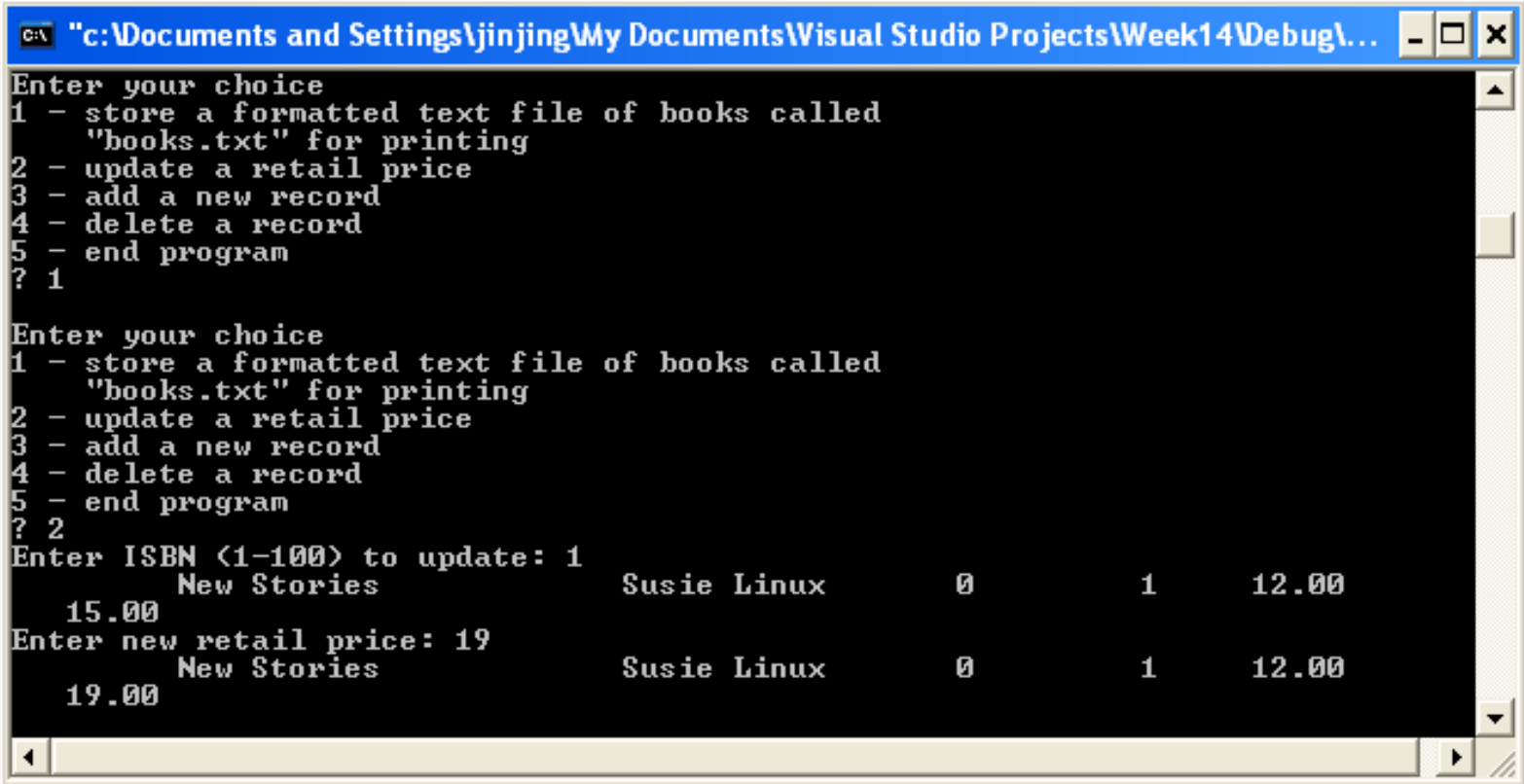
# Add Book



```
c:\Documents and Settings\jinjing\My Documents\Visual Studio Projects\Week14\Debug\W...
Enter your choice
1 - store a formatted text file of books called
    "books.txt" for printing
2 - update a retail price
3 - add a new record
4 - delete a record
5 - end program
? 1

Enter your choice
1 - store a formatted text file of books called
    "books.txt" for printing
2 - update a retail price
3 - add a new record
4 - delete a record
5 - end program
? 3
Enter new ISBN number < 1 - 100 >: 2
Enter title:
Old Tales
Enter author:
Jay Div
Enter Year:
2010
Enter wholesale price:
23
Enter retail price:
45
```

# Update Retail Price

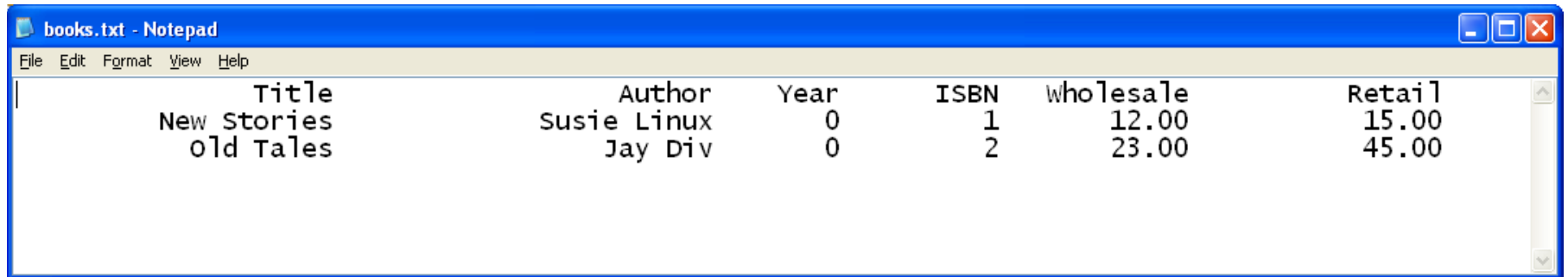


```
C:\ "c:\Documents and Settings\jnjing\My Documents\Visual Studio Projects\Week14\Debug\... - □ ×
```

```
Enter your choice
1 - store a formatted text file of books called
    "books.txt" for printing
2 - update a retail price
3 - add a new record
4 - delete a record
5 - end program
? 1

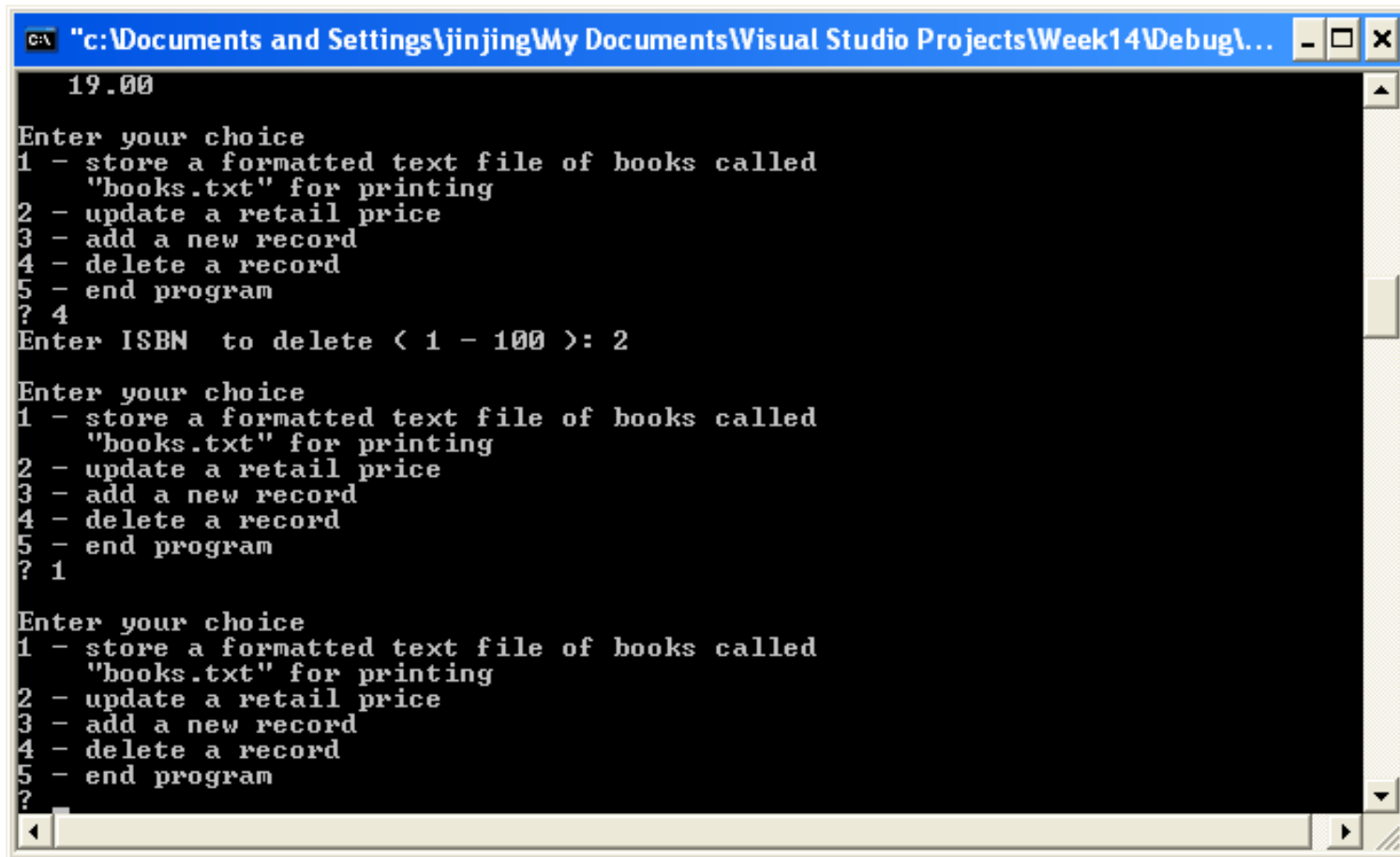
Enter your choice
1 - store a formatted text file of books called
    "books.txt" for printing
2 - update a retail price
3 - add a new record
4 - delete a record
5 - end program
? 2
Enter ISBN <1-100> to update: 1
    New Stories          Susie Linux          0          1          12.00
    15.00
Enter new retail price: 19
    New Stories          Susie Linux          0          1          12.00
    19.00
```

# Check Text File Output



Title	Author	Year	ISBN	wholesale	Retail
New Stories	Susie Linux	0	1	12.00	15.00
old Tales	Jay Div	0	2	23.00	45.00

# Delete Book



```
C:\ "c:\Documents and Settings\jinjing\My Documents\Visual Studio Projects\Week14\Debug\... 19.00

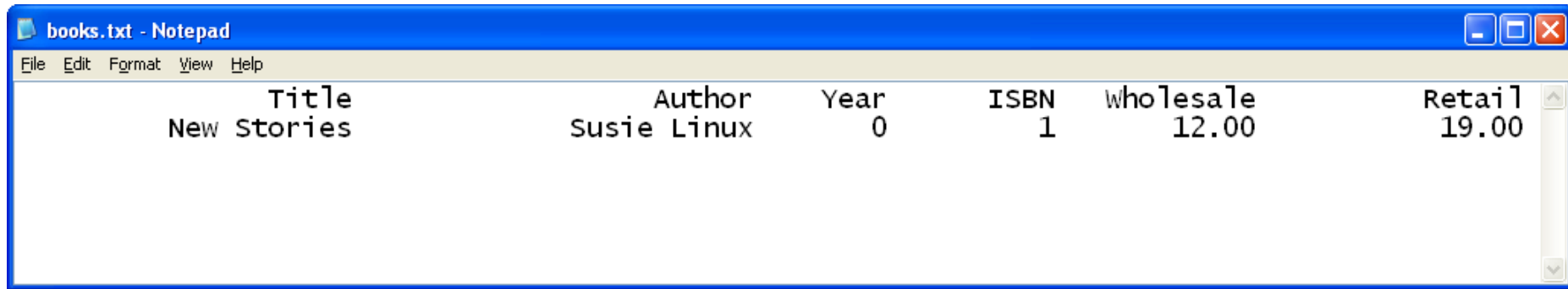
Enter your choice
1 - store a formatted text file of books called
   "books.txt" for printing
2 - update a retail price
3 - add a new record
4 - delete a record
5 - end program
? 4
Enter ISBN to delete < 1 - 100 >: 2

Enter your choice
1 - store a formatted text file of books called
   "books.txt" for printing
2 - update a retail price
3 - add a new record
4 - delete a record
5 - end program
? 1

Enter your choice
1 - store a formatted text file of books called
   "books.txt" for printing
2 - update a retail price
3 - add a new record
4 - delete a record
5 - end program
?
```



# Check Text file Output



books.txt - Notepad

File Edit Format View Help

Title	Author	Year	ISBN	wholesale	Retail
New Stories	Susie Linux	0	1	12.00	19.00