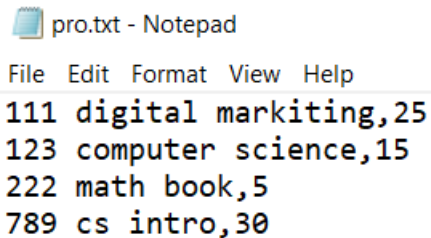


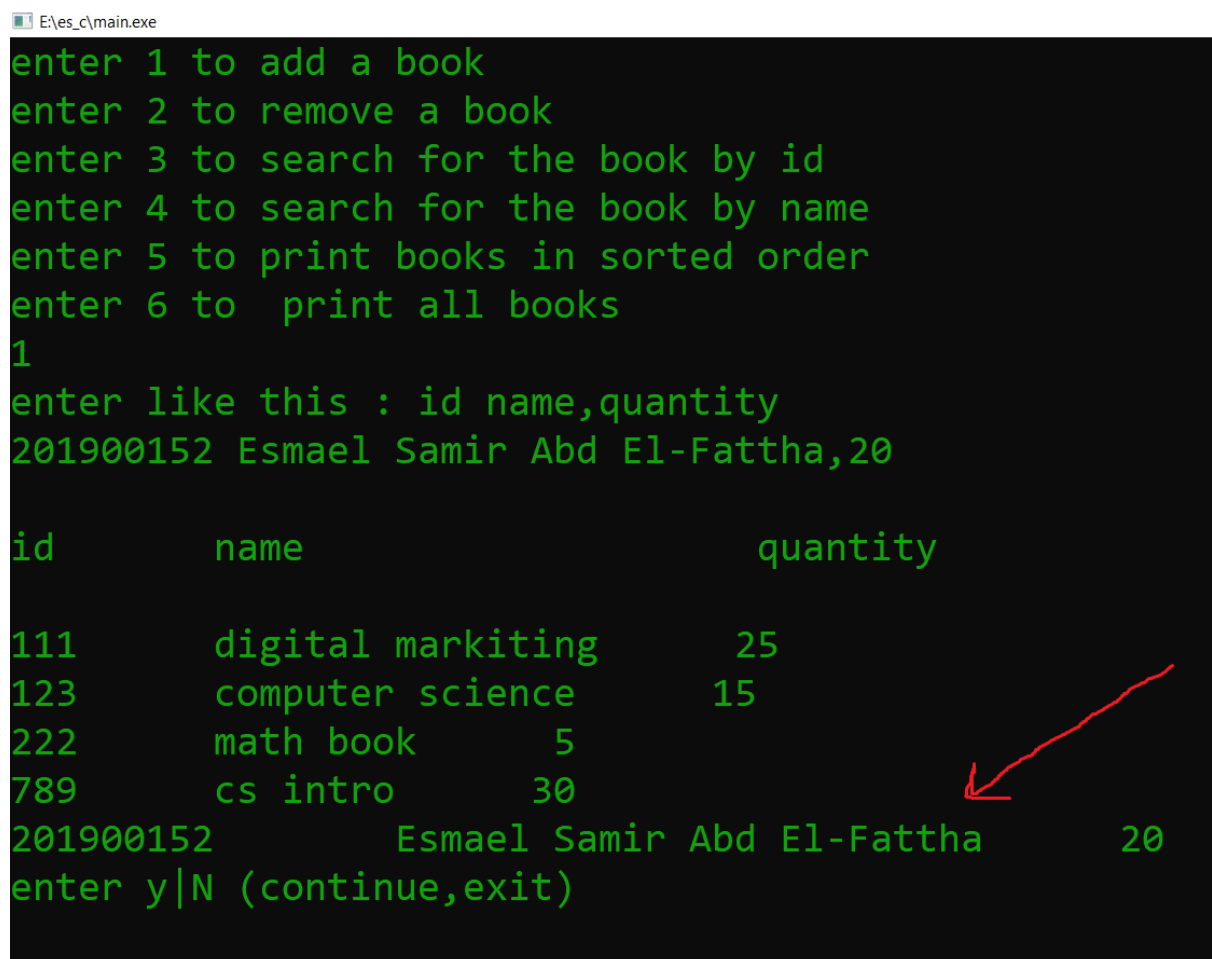
Screenshots of Output Screen

a. Create a text file



```
File Edit Format View Help
111 digital markiting,25
123 computer science,15
222 math book,5
789 cs intro,30
```

b. Insert a book



```
E:\es_c\main.exe
enter 1 to add a book
enter 2 to remove a book
enter 3 to search for the book by id
enter 4 to search for the book by name
enter 5 to print books in sorted order
enter 6 to print all books
1
enter like this : id name,quantity
201900152 Esmael Samir Abd El-Fattha,20

id          name          quantity

111         digital markiting    25
123         computer science     15
222         math book           5
789         cs intro           30
201900152   Esmael Samir Abd El-Fattha  20
enter y|N (continue,exit)
```

Name:

ID:

c. Delete a book by id

E:\es_c\main.exe

```
enter 1 to add a book
enter 2 to remove a book
enter 3 to search for the book by id
enter 4 to search for the book by name
enter 5 to print books in sorted order
enter 6 to print all books
2
enter id to remove this book
222

id          name          quantity
111         digital markiting    25
123         computer science    15
789         cs intro        30
201900152   Esmael Samir Abd El-Fattha  20
enter y|N (continue,exit)
```

d. Search a book by id and display its name and quantity using linear search recursively. If not exist, display “Not found”.

Name:

ID:

E:\es_c\main.exe

```
enter 1 to add a book
enter 2 to remove a book
enter 3 to search for the book by id
enter 4 to search for the book by name
enter 5 to print books in sorted order
enter 6 to print all books
```

3

```
enter id to search for the book
```

789

id	name	quantity
----	------	----------

789	cs intro	30
-----	----------	----

```
enter y|N (continue,exit)
```

E:\es_c\main.exe

```
enter 1 to add a book
enter 2 to remove a book
enter 3 to search for the book by id
enter 4 to search for the book by name
enter 5 to print books in sorted order
enter 6 to print all books
```

3

```
enter id to search for the book
```

777

NOT FOUND

```
enter y|N (continue,exit)
```

Name:

ID:

- e. **Search a book by name and display its id and quantity using binary search. If not exist, display “Not found”.**

The screenshot of output screen

- Choose an *id that exist* to display.
- Choose an *id that doesn't exist* in your file.

E:\es_c\main.exe

```
enter 1 to add a book
enter 2 to remove a book
enter 3 to search for the book by id
enter 4 to search for the book by name
enter 5 to print books in sorted order
enter 6 to print all books
4
enter your book name for search like:" name" without quotes
digital markiting

id          name          quantity
111         digital markiting    25

enter y|N (continue,exit)
```

E:\es_c\main.exe

```
enter 1 to add a book
enter 2 to remove a book
enter 3 to search for the book by id
enter 4 to search for the book by name
enter 5 to print books in sorted order
enter 6 to print all books
4
enter your book name for search like:" name" without quotes
Electronics
NOT FOUND

enter y|N (continue,exit)
```

Name:

ID:

- f. Display all books sorted by name, and their corresponding ids and quantity.**

E:\es_c\main.exe

```
enter 1 to add a book
enter 2 to remove a book
enter 3 to search for the book by id
enter 4 to search for the book by name
enter 5 to print books in sorted order
enter 6 to print all books
5

id          name          quantity

201900152    Esmael Samir Abd El-Fattah    20
123          computer science    15
789          cs intro            30
111          digital markiting    25

enter y|N (continue,exit)
```

- g. Display all books unsorted, their ids, names and quantity (as entered)**

Name:

ID:

```
E:\es_c\main.exe
enter 1 to add a book
enter 2 to remove a book
enter 3 to search for the book by id
enter 4 to search for the book by name
enter 5 to print books in sorted order
enter 6 to print all books
6

id          name          quantity
111         digital markiting    25
123         computer science     15
789         cs intro             30
201900152   Esmael Samir Abd El-Fattah  20
enter y|N (continue,exit)
```

h. Ask if you want another operation
This is The End of do While loop

```
E:\es_c\main.exe
enter 1 to add a book
enter 2 to remove a book
enter 3 to search for the book by id
enter 4 to search for the book by name
enter 5 to print books in sorted order
enter 6 to print all books
4
enter your book name for search like:" name" without quotes
Electronics
NOT FOUND

enter y|N (continue,exit)
N
Process returned 0 (0x0)   execution time : 585.908 s
Press any key to continue.
```