COMPUTER ORGANISATION AND ASSEMBLY LANGUAGE PROJECT REPORT

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SUBMITTED TO:
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Project Title: Book Management System

Introduction:

This project is a menu-driven Book Management System using the EMU8086 emulator. The system allows the user to select books from multiple categories, add them to a virtual cart, and then finalize the purchase using a payment method. It demonstrates how logic, loops, and arithmetic can be handled at the low-level Assembly programming level.

Features

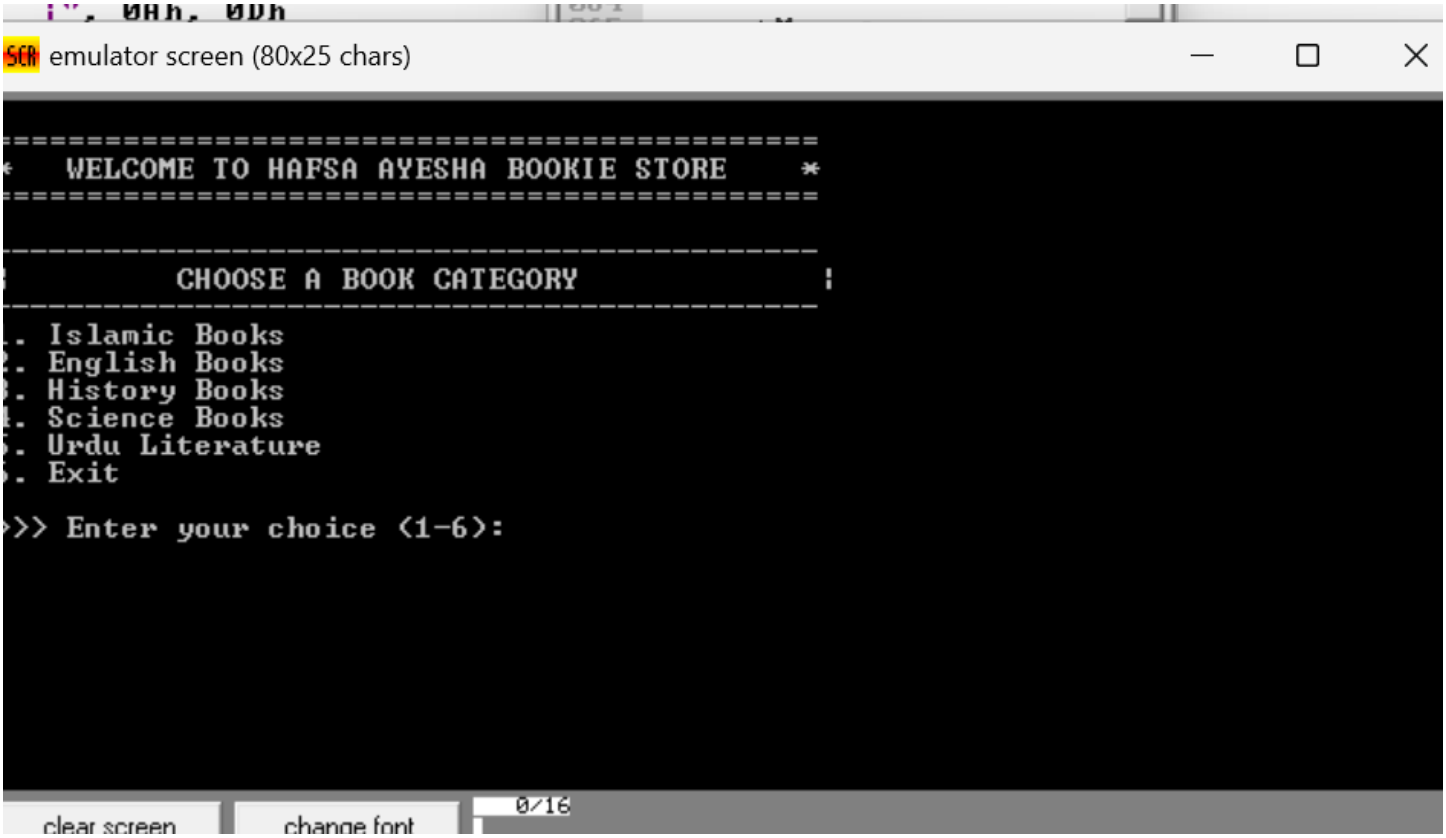
- Welcome screen and category menu
- Five book categories with three books each
- Book selection and price calculation
- Option to buy multiple books
- Choice of payment method (Cash or Card)
- Final bill display using a custom number printing routine

Program Flow

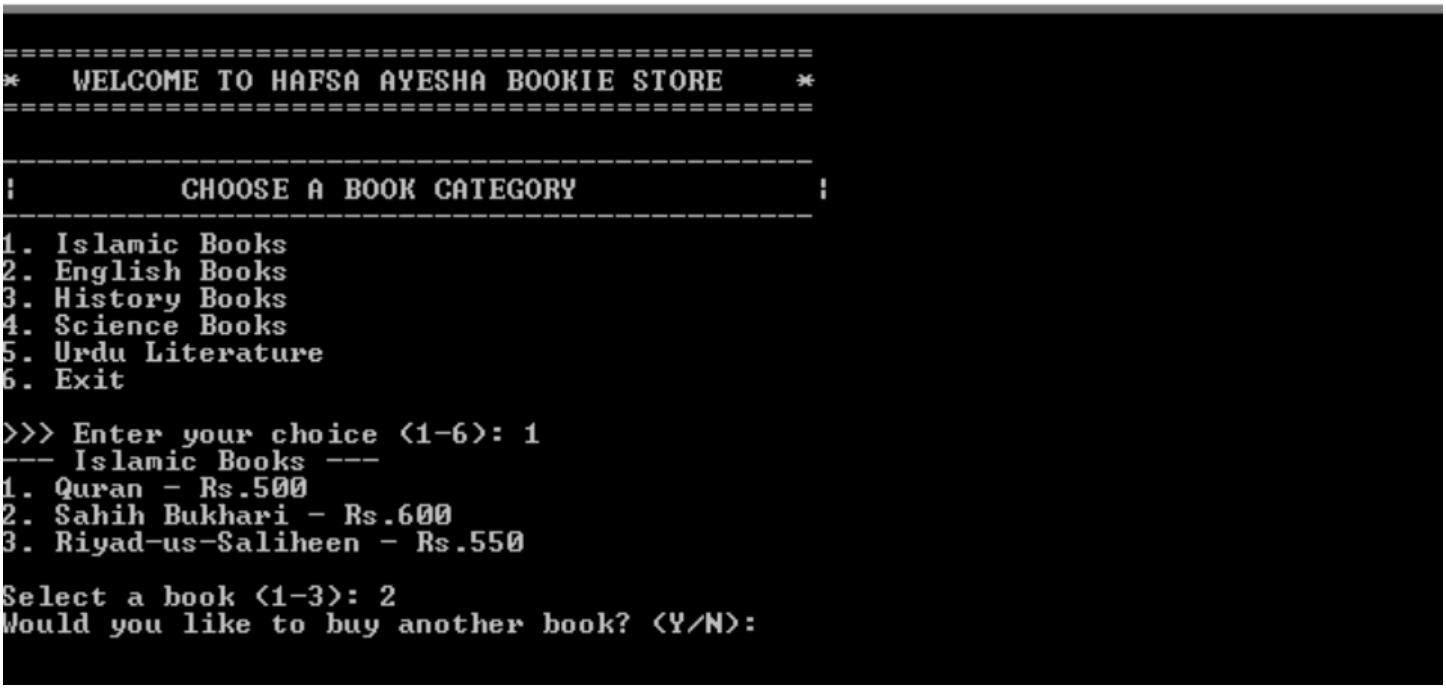
- Displays welcome message and category menu
- User selects a category and book
- Book price is added to the total bill
- User can continue shopping or proceed to payment
- Displays final amount and confirmation message
- Exits with a thank-you note

DEMO:

INTERFACE:



SELECTION OF BOOKS:



BACK TO MAIN MENU IF ANOTHER BOOK IS TO BE SELECTED:

```
3. History Books
4. Science Books
5. Urdu Literature
6. Exit

>>> Enter your choice (1-6): 5
--- Urdu Literature ---
1. Peer-e-Kamil - Rs.410
2. Aangan - Rs.430
3. Udas Naslain - Rs.440

Select a book (1-3): 2
Would you like to buy another book? (Y/N): Y
-----------------------------------------
|         CHOOSE A BOOK CATEGORY         |
-----------------------------------------
1. Islamic Books
2. English Books
3. History Books
4. Science Books
5. Urdu Literature
6. Exit

>>> Enter your choice (1-6): _
```

PAYMENT METHOD -CASH OR CARD (CASH HERE):

```
-----------------------------------------
|         CHOOSE A BOOK CATEGORY         |
-----------------------------------------
1. Islamic Books
2. English Books
3. History Books
4. Science Books
5. Urdu Literature
6. Exit

>>> Enter your choice (1-6): 5
--- Urdu Literature ---
1. Peer-e-Kamil - Rs.410
2. Aangan - Rs.430
3. Udas Naslain - Rs.440

Select a book (1-3): 1
Would you like to buy another book? (Y/N): N
Choose payment method - 1. Cash  2. Card: 1
Payment successful via Cash! Thank you for your purchase!

Your total bill is: 410
*** Thank you for visiting Hafsa Ayesha Bookie Store! ***
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Conclusion

This project successfully demonstrates a real-life application implemented in Assembly Language. It shows that even complex features like billing, selection menus, and user interaction can be built with low-level programming. The project enhanced skills in logic building, register usage, and interrupt handling.