

N.B.K.R. Institute of Science and  
Technology

# BANKING SYSTEM

## USING DATA STRUCTURES

# Our Team

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# About The Program

A banking system implemented in C using data structures provides an efficient and organized way to manage financial accounts and transactions. The program utilizes several fundamental data structures to achieve its functionality, including structures for storing account information, linked lists for dynamic account management, and stacks for maintaining transaction histories. The account structure serves as the foundation, containing essential details like account numbers, customer names, user IDs, passwords, and balances.



# About The Program

**Structures (struct)** - Used to create custom data types (Account, Transaction, Node)

**Linked List** - Dynamic data structure for storing accounts (Node with next pointer)

**Stack** - LIFO structure for transaction history (TransactionStack with items array and top pointer)

# Main Info

- AIM- Creating a Banking System Program using C Data Structures
- Source code- <https://github.com/prapulkumar2007/banking-system/blob/e4f0f6c7c85a43d8765d053d0c4f8b6b8f5ea200/banking%20system>

# Output

```
*** ENHANCED BANKING SYSTEM WITH LOGIN ***
```

1. Login
2. Create New Account
3. Exit

```
Enter your choice: 2
```

```
--- Account Creation ---
```

```
Enter account number: 9908704629
```

```
Enter account holder name: prapulkumar
```

```
Choose a user ID: prapul1
```

```
Choose a password (min 8 chars, at least 1 letter and 1 number): prapulkumar2007
```

```
Enter initial deposit amount: 35000
```

```
Account created successfully!
```



# Conclusion

This **banking system program** successfully demonstrates how **core data structures** (structures, linked lists, and stacks) can be applied to build a **functional, organized, and efficient** financial management system in C. By simulating real-world banking operations—such as **account creation, authentication, deposits, withdrawals, and transaction tracking**—the program highlights the **practical use of data structures** in software development.



THANK YOU  
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