

## C Programming Mini Projects Collection

This repository contains a set of mini-projects built using the C programming language. These projects demonstrate fundamental programming concepts such as conditionals, loops, arrays, functions, structures, and file handling.

Each project is designed to be self-contained and compiled independently.

### Projects Overview

#### 1. Text-Based Adventure Game

A simple console-based adventure game where the player navigates through rooms using directional commands.

Key Features:

- Room-to-room navigation (North, South, East, West)
- Interactive text prompts
- Endless play loop

Run Instructions:

```
gcc adventure_game.c -o adventure_game
```

```
./adventure_game
```

#### 2. Hotel Menu System

Simulates a restaurant menu that displays food items based on the meal type selected by the user.

Key Features:

- Menu for Breakfast, Lunch, Dinner, and Snacks
- Uses switch-case structure
- Simple CLI interaction

Run Instructions:

```
gcc hotel_menu.c -o hotel_menu
```

```
./hotel_menu
```

### 3. CR Election Voting System

A basic voting system to simulate a class representative election between three candidates.

Key Features:

- Vote casting system
- Real-time vote count
- Winner declaration logic

Run Instructions:

```
gcc voting_system.c -o voting_system
```

```
./voting_system
```

### 4. Student Management System

Allows user to manage student records including names, roll numbers, and marks.

Key Features:

- Add and display students
- Search by roll number
- Delete student records
- Structured using arrays and basic CRUD logic

Run Instructions:

```
gcc student_management.c -o student_management
```

```
./student_management
```

### 5. Bank Management System

Provides functionality for managing bank accounts and performing basic operations.

## Key Features:

- Create accounts
- Deposit and withdraw money
- View and search accounts
- Menu-driven with input validation

## Run Instructions:

```
gcc bank_system.c -o bank_system  
./bank_system
```

## Getting Started

To run any of the programs:

1. Clone or download this repository.
2. Navigate to the directory containing the .c file you want to run.
3. Compile the code with a C compiler like gcc.
4. Execute the compiled file.

## Example:

```
gcc student_management.c -o student_management  
./student_management
```

## Requirements

- GCC compiler (or any C compiler)
- Basic terminal or command line usage

## License

This project is open for educational use. Attribution is appreciated.

## Author

Developed by a student practicing C programming fundamentals. Contributions and improvements are welcome!