```c
#include <stdio.h>
#include <string.h>

// Function Declarations
void login();
void adminMenu();
void userMenu();
void addMembership();
void updateMembership();
void reports();
void transactions();

// Global Variables
struct Membership {
    int id;
    int duration; // In months
    char status[10];
} memberships[10];

int membershipCount = 0;

int main() {
    printf("Welcome to the Library Management System\n");
    login();
    return 0;
}

void login() {
    char username[20], password[20];

    printf("\nLogin Page\n");
    printf("Enter Username: ");
    scanf("%s", username);
    printf("Enter Password: ");
    scanf("%s", password);

    if (strcmp(username, "admin") == 0 && strcmp(password, "admin123") == 0) {
        printf("\nLogin Successful! Welcome Admin.\n");
        adminMenu();
    } else if (strcmp(username, "user") == 0 && strcmp(password, "user123") == 0) {
        printf("\nLogin Successful! Welcome User.\n");
        userMenu();
    } else {
        printf("\nInvalid credentials. Please try again.\n");
        login();
    }
}
```

```c
void adminMenu() {
    int choice;
    do {
        printf("\n--- Admin Menu ---\n");
        printf("1. Add Membership\n");
        printf("2. Update Membership\n");
        printf("3. Reports\n");
        printf("4. Transactions\n");
        printf("5. Logout\n");
        printf("Enter your choice: ");
        scanf("%d", &choice);

        switch (choice) {
            case 1: addMembership(); break;
            case 2: updateMembership(); break;
            case 3: reports(); break;
            case 4: transactions(); break;
            case 5: printf("\nLogging out...\n"); break;
            default: printf("Invalid choice! Try again.\n");
        }
    } while (choice != 5);
}

void userMenu() {
    int choice;
    do {
        printf("\n--- User Menu ---\n");
        printf("1. Reports\n");
        printf("2. Transactions\n");
        printf("3. Logout\n");
        printf("Enter your choice: ");
        scanf("%d", &choice);

        switch (choice) {
            case 1: reports(); break;
            case 2: transactions(); break;
            case 3: printf("\nLogging out...\n"); break;
            default: printf("Invalid choice! Try again.\n");
        }
    } while (choice != 3);
}

void addMembership() {
    int duration;
    printf("\n--- Add Membership ---\n");
    printf("Enter Membership Duration (6 = 6 months, 12 = 1 year, 24 = 2 years): ");
    scanf("%d", &duration);
```

```c
        if (duration == 6 || duration == 12 || duration == 24) {
            memberships[membershipCount].id = membershipCount + 1;
            memberships[membershipCount].duration = duration;
            strcpy(memberships[membershipCount].status, "Active");
            printf("Membership added successfully! ID: %d, Duration: %d months\n",
memberships[membershipCount].id, duration);
            membershipCount++;
        } else {
            printf("Invalid duration. Please enter 6, 12, or 24.\n");
        }
}

void updateMembership() {
    int id, choice;
    printf("\n--- Update Membership ---\n");
    printf("Enter Membership ID to update: ");
    scanf("%d", &id);

    if (id > 0 && id <= membershipCount) {
        printf("1. Extend Membership\n");
        printf("2. Cancel Membership\n");
        printf("Enter your choice: ");
        scanf("%d", &choice);

        if (choice == 1) {
            memberships[id - 1].duration += 6;
            printf("Membership extended by 6 months. New Duration: %d months\n",
memberships[id - 1].duration);
        } else if (choice == 2) {
            strcpy(memberships[id - 1].status, "Cancelled");
            printf("Membership ID %d is now Cancelled.\n", id);
        } else {
            printf("Invalid choice!\n");
        }
    } else {
        printf("Invalid Membership ID.\n");
    }
}

void reports() {
    printf("\n--- Reports ---\n");
    printf("ID\tDuration\tStatus\n");
    for (int i = 0; i < membershipCount; i++) {
        printf("%d\t%d months\t%s\n", memberships[i].id, memberships[i].duration,
memberships[i].status);
    }
}
```

```c
void transactions() {
    printf("\n--- Transactions ---\n");
    printf("Feature not implemented yet. Coming soon...\n");
}
```