**FINAL PROJECT REPORT**

ABOUT

**PHARMACY APK**

**DAVIS MAULANA HERMANTO**

**1I**

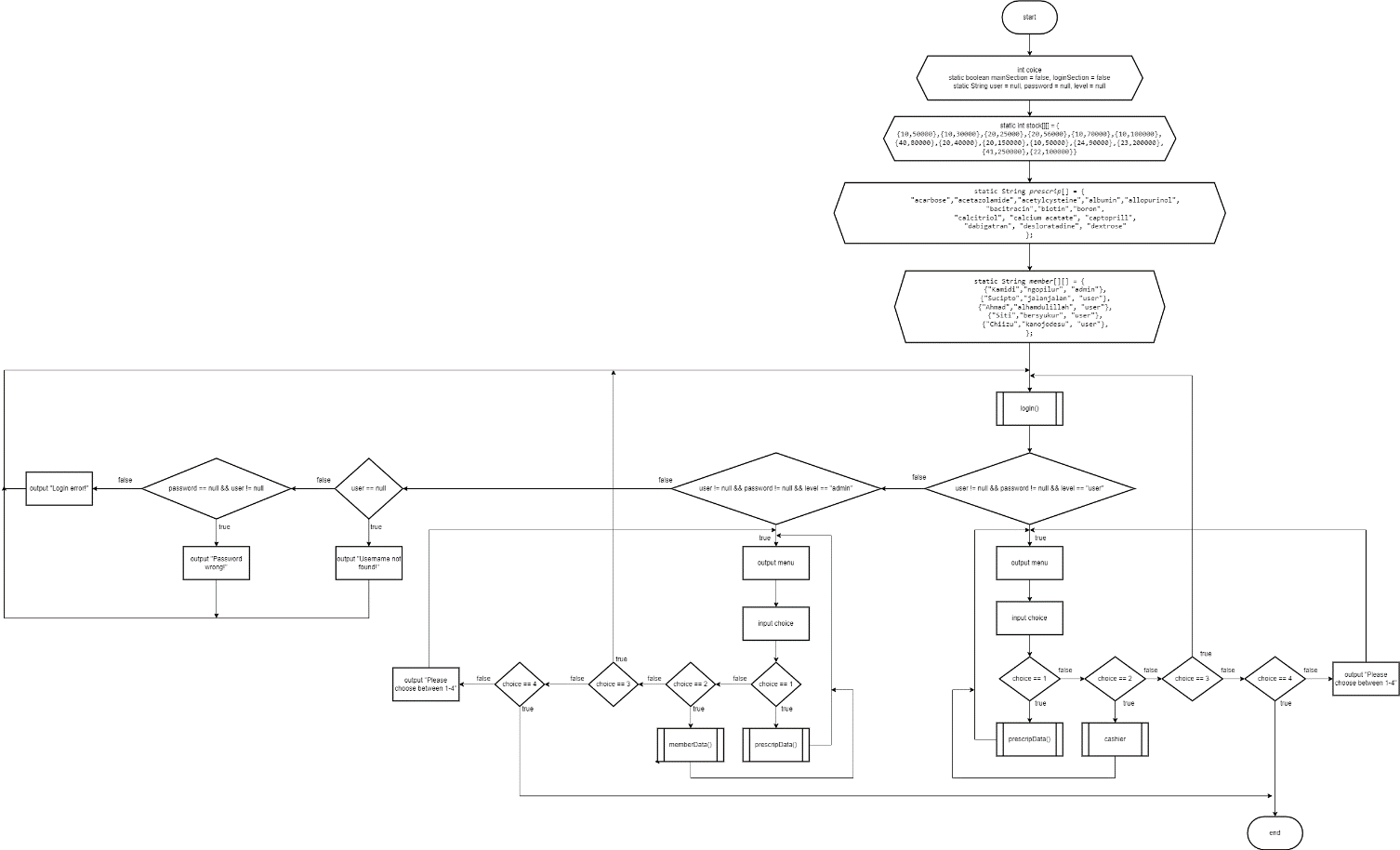


**POLITEKNIK NEGERI MALANG**

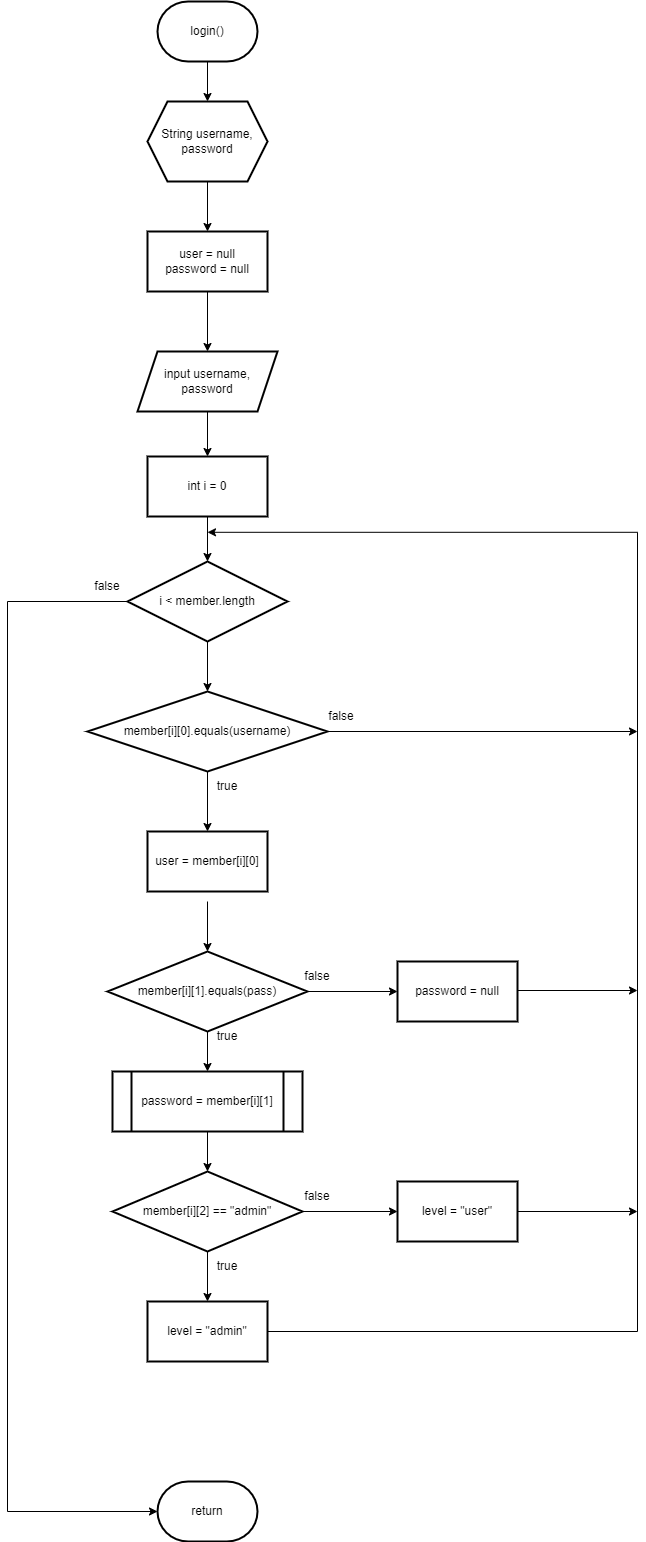
**13 DECEMBER 2022**

* 1. **Flowchart**

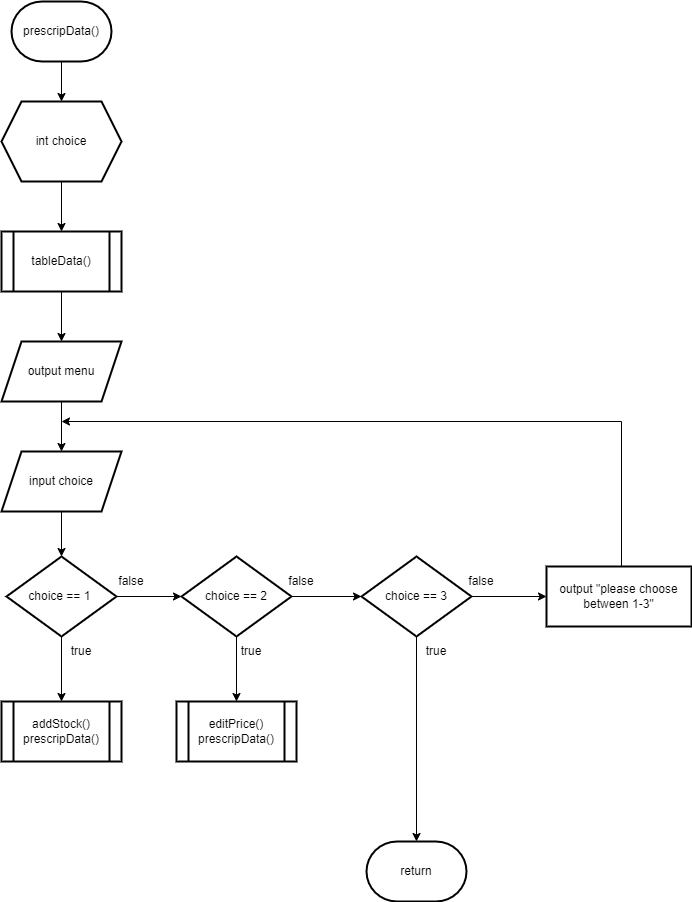
1. **Main Function**



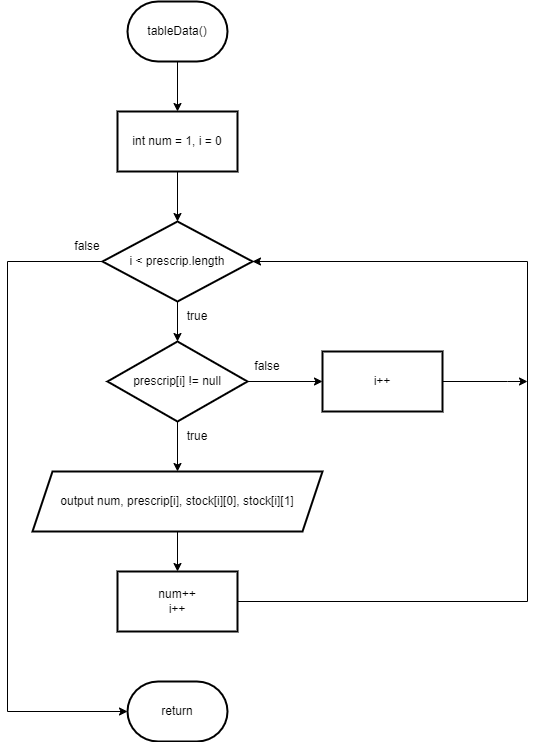
1. **Login Function**



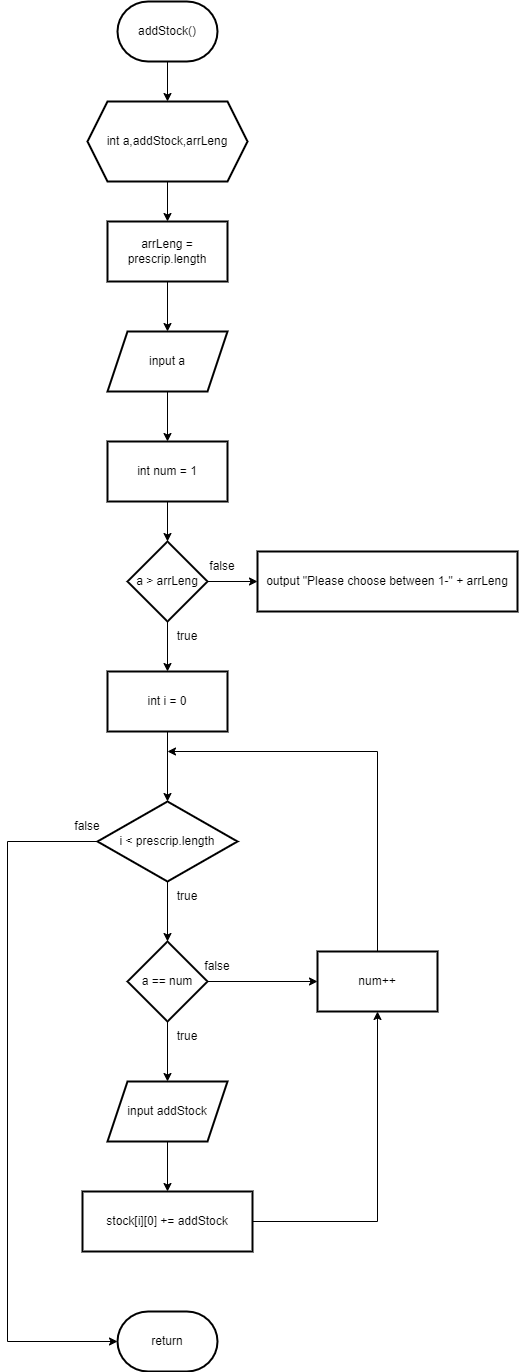
1. **prescripData Function**



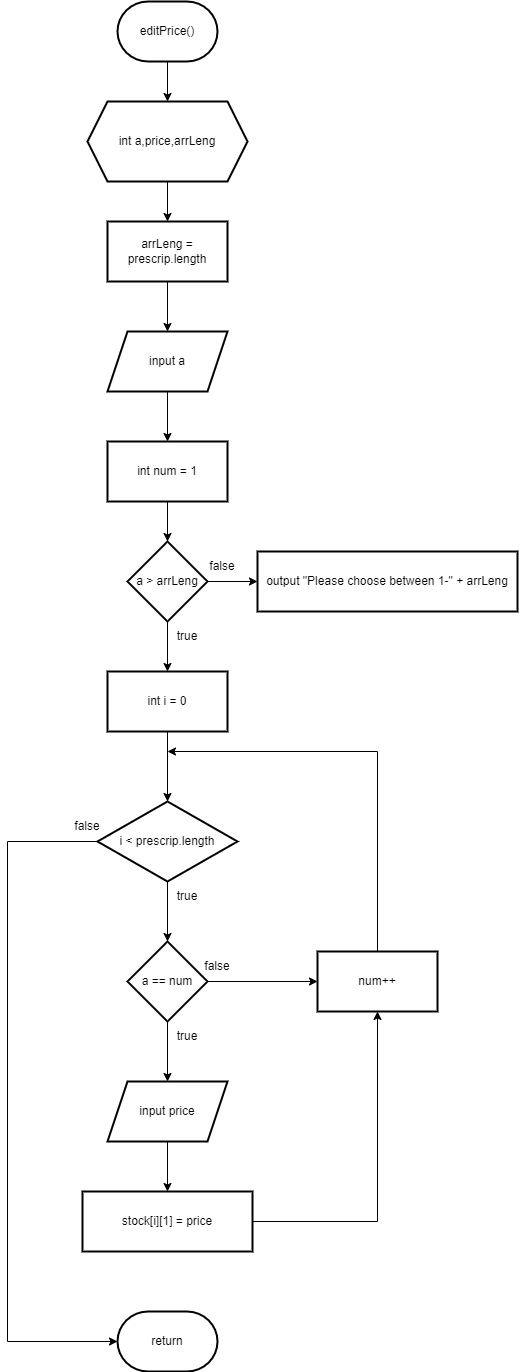
1. **tableData Function**



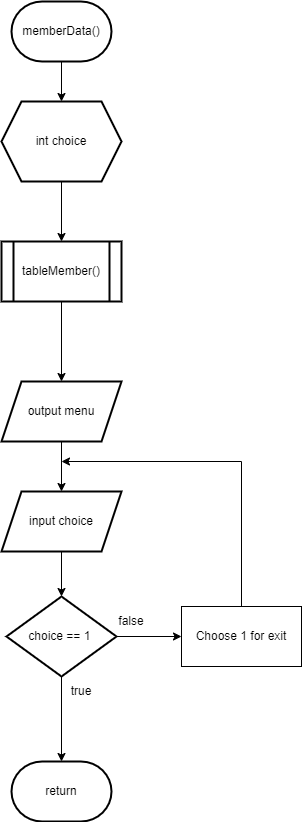
1. **addStock Function**



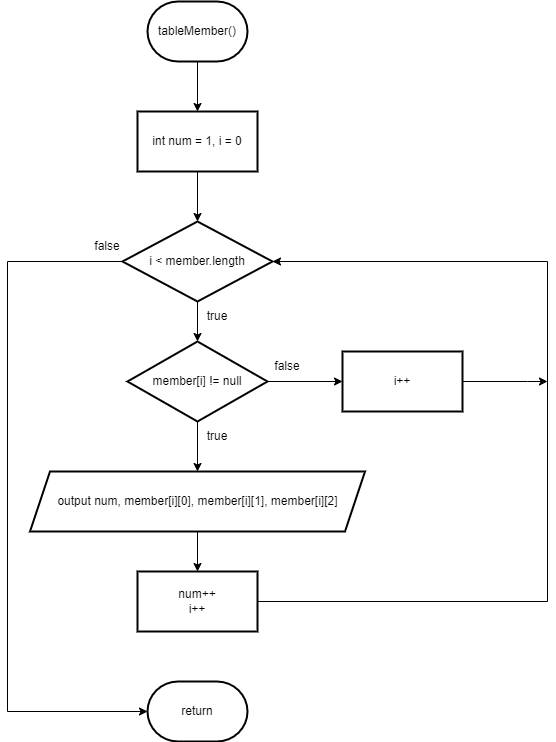
1. **editPrice Function**



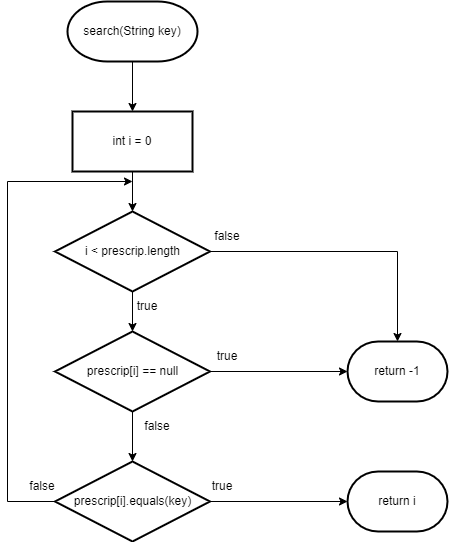
1. **memberData Function**



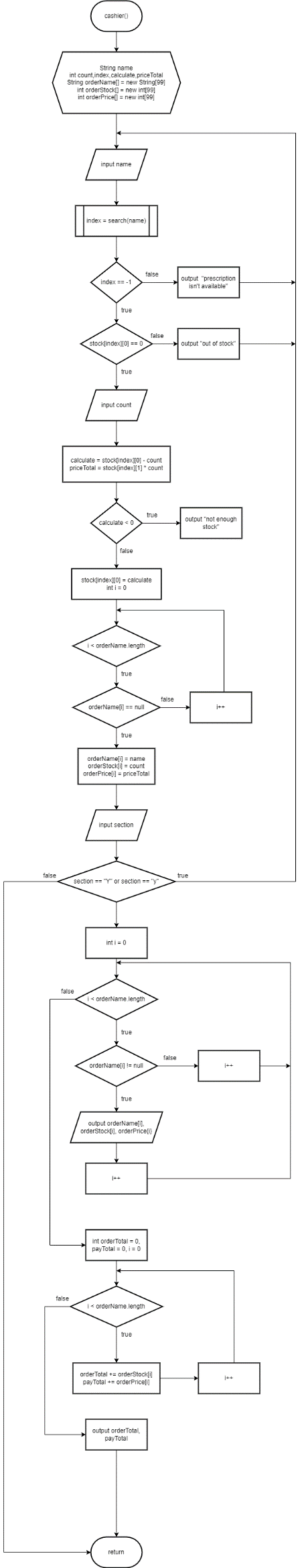
1. **tableMember Function**



1. **search Function**



1. **cashier Function**

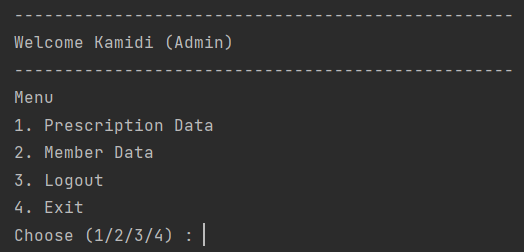


* 1. **Steps to Run the Program**

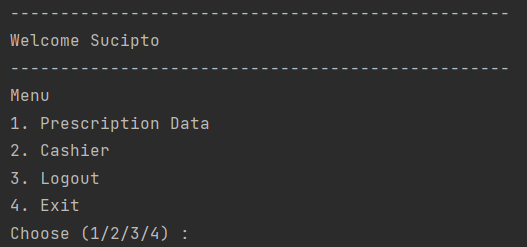
*//contains the steps for running the application starting from the first run until all menus are tried to run*

The following are the steps for running the application

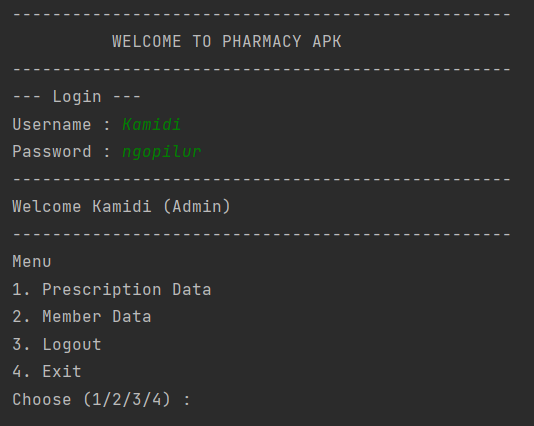
1. This application consists of 4 menus, namely adding data, borrowing, returning, and fines.
2. Admin menu



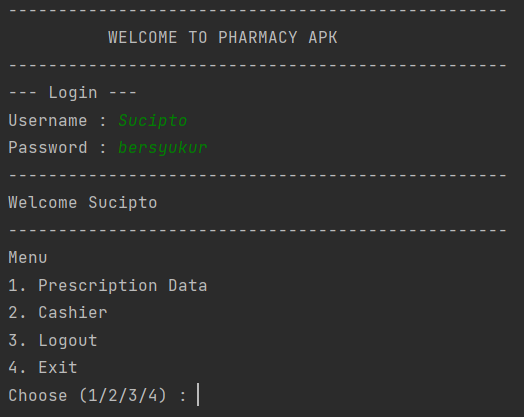
1. User menu



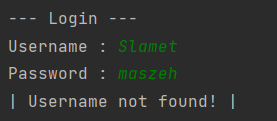
1. When you first start the application, you must login first. If you input a username called “Kamidi” and the password is “ngopilur”, after that you will enter the admin page. If you input the usernames like “Sucipto,Ahmad,Siti,Chiizu”, after that you will enter the user page.
2. Admin login



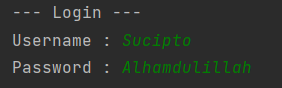
1. User login



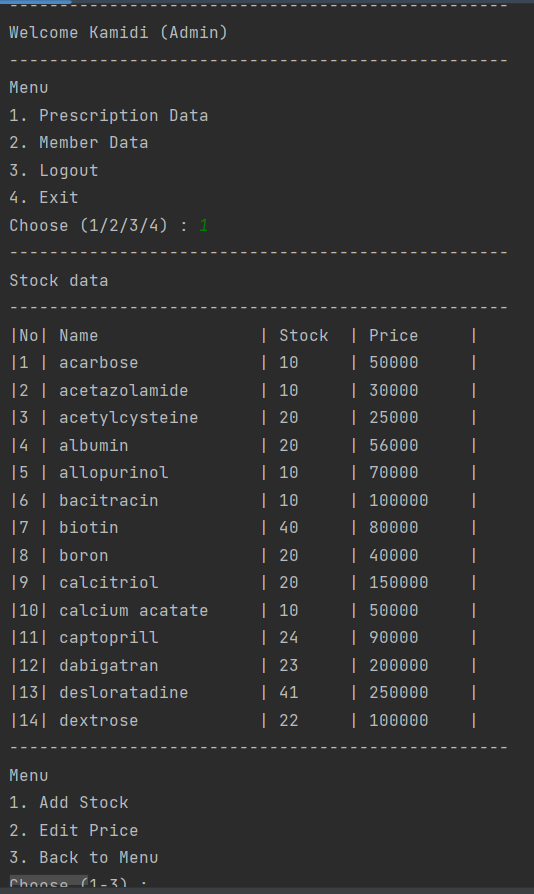
1. if you input a username that is not in the member list then…



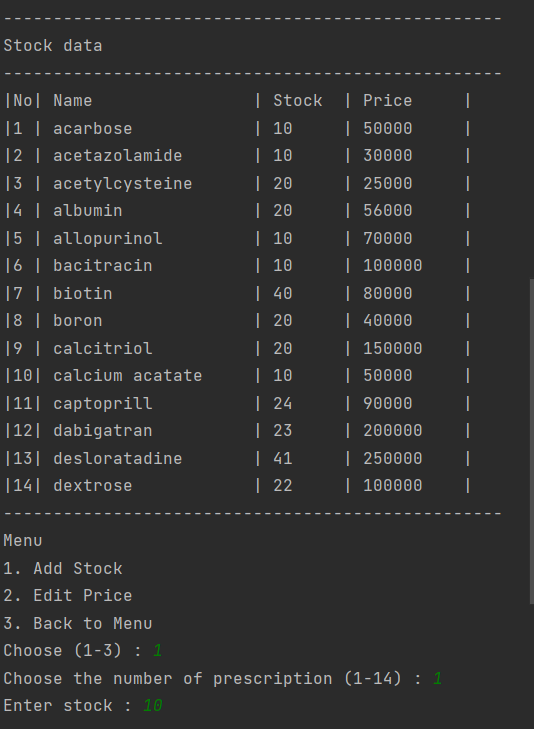
1. if you input a username that is in the member list but you are false when you input the wrong password.

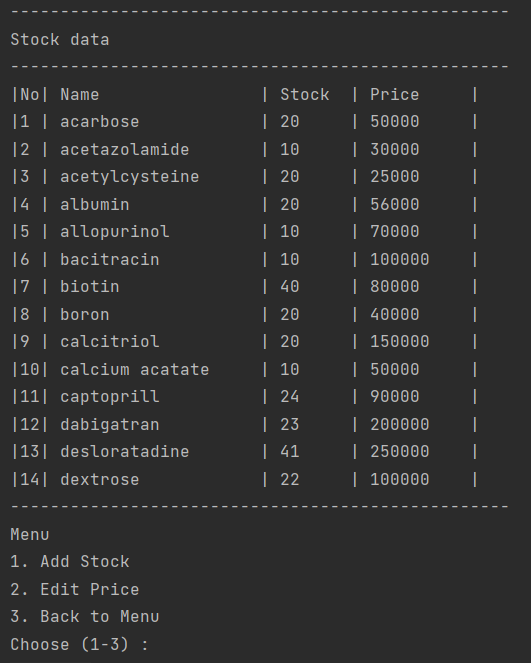


1. On the admin page, if you choose number 1 on the menu, you will enter the prescriptions data page

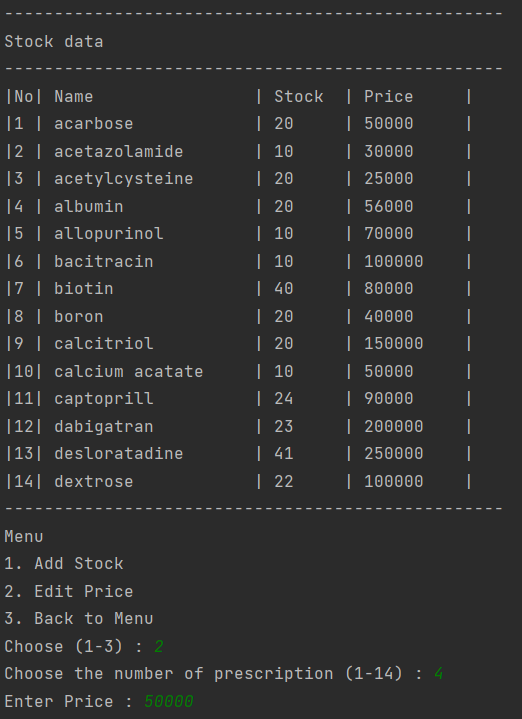


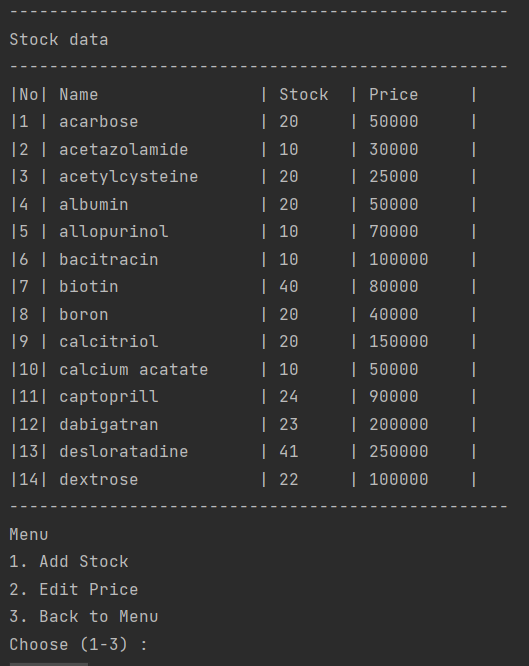
1. On the prescriptions data page menu, there are 3 selection. if you choose number 1, you will enter the add stock prescription page. In the that page, you can add prescription stock data that contains in this table.



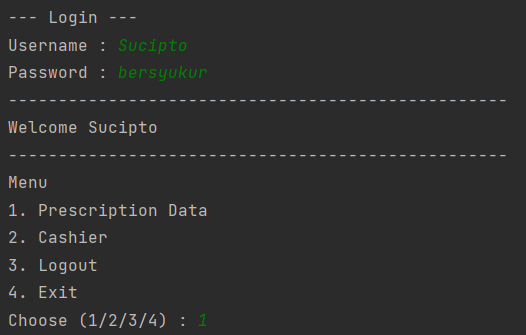


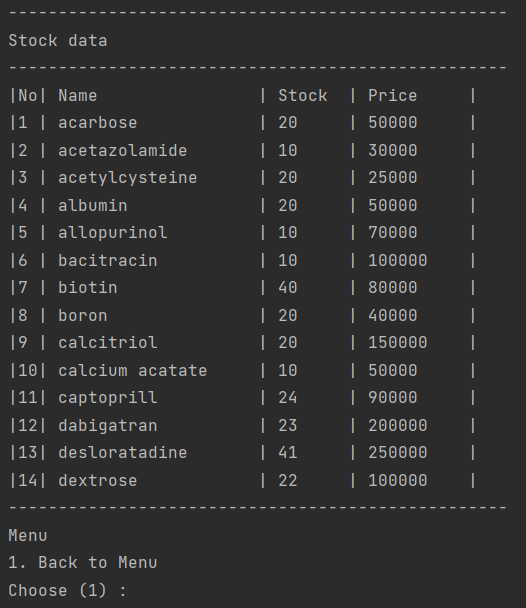
1. On the prescriptions data page menu, if you choose number 2, you will enter the prescription price edit page. In the that page, you can edit the prescription price data that contains in this table.



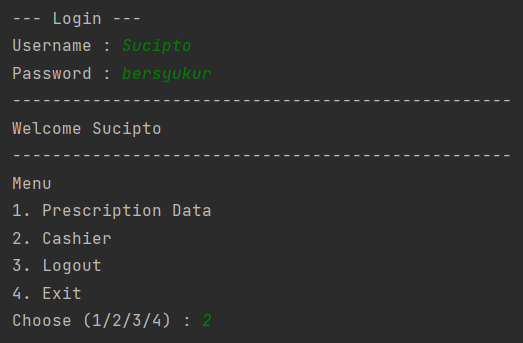


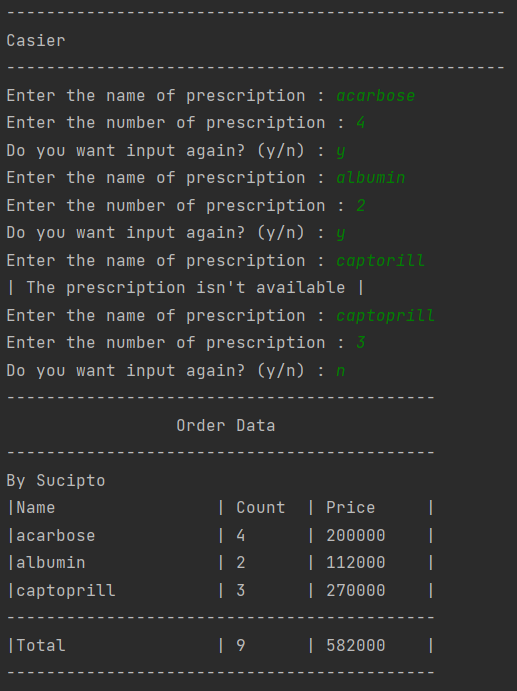
1. On the user page, if you choose number 1 on the menu, you will enter the prescriptions data page



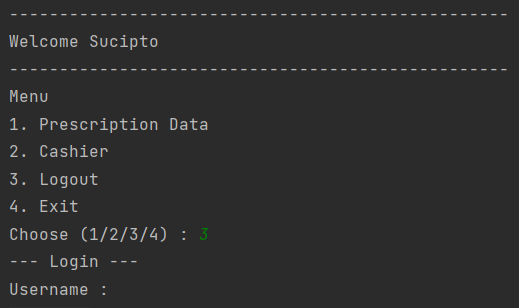


1. On the user page, if you choose number 2 on the menu, you will enter the cashier page. In the cashier page, you can make transactions like this, and then the all of transactions data will be displayed below like this.

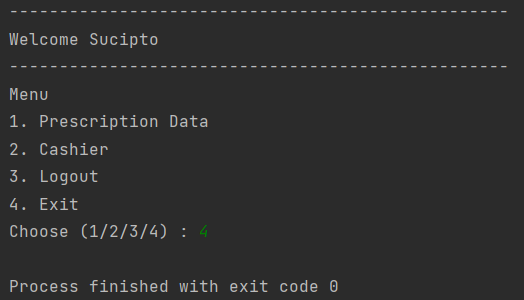




1. On the user page and admin page menu. If you choose number 3, you will return to the login page.



1. On the user page and admin page menu. if you choose number 4, the program will be stopped automatically.



* 1. **Program Code**

1. import java.util.Scanner;  
     
   public class Main {  
    static Scanner *sc* = new Scanner(System.*in*);  
    static boolean *mainSection* = false, *loginSection* = false;  
    static String *user* = null, *password* = null, *level* = null;  
    static int *stock*[][] = {  
    {10,50000},{10,30000},{20,25000},{20,56000},{10,70000},  
    {10,100000},{40,80000},{20,40000},  
    {20,150000},{10,50000},{24,90000},  
    {23,200000},{41,250000},{22,100000}  
    };  
    static String *prescrip*[] = {  
    "acarbose","acetazolamide","acetylcysteine","albumin","allopurinol",  
    "bacitracin","biotin","boron",  
    "calcitriol", "calcium acatate", "captoprill",  
    "dabigatran", "desloratadine", "dextrose"  
    };  
     
    static String *member*[][] = {  
    {"Kamidi","ngopilur", "admin"},  
    {"Sucipto","bersyukur", "user"},  
    {"Ahmad","alhamdulillah", "user"},  
    {"Siti","bersyukur", "user"},  
    {"Chiizu","kanojodesu", "user"},  
    };  
     
    static void line(){  
    System.*out*.println("--------------------------------------------------");  
    }  
     
     
    static void cashier(){  
    String name;  
    int count,index,calculate,priceTotal;  
    String orderName[] = new String[99];  
    int orderStock[] = new int[99];  
    int orderPrice[] = new int[99];  
    boolean repeatSec = false;  
     
    *line*();  
    System.*out*.println("Casier");  
    *line*();  
     
    do {  
    System.*out*.print("Enter the name of prescription : ");  
    name = *sc*.nextLine();  
    index = *search*(name);  
    if (index == -1){  
    System.*out*.println("| The prescription isn't available |");  
    repeatSec = true;  
    }else if(*stock*[index][0] == 0){  
    System.*out*.println("| Out of stock |");  
    repeatSec = true;  
    }else {  
    System.*out*.print("Enter the number of prescription : ");  
    count = *sc*.nextInt();  
    *sc*.nextLine();  
    calculate = *stock*[index][0] - count;  
    priceTotal = *stock*[index][1] \* count;  
    if (calculate < 0){  
    System.*out*.println("| Not enough stock |");  
    repeatSec = true;  
    }else {  
    *stock*[index][0] = calculate;  
    for (int i = 0; i < orderName.length;i++){  
    if (orderName[i] == null) {  
    orderName[i] = name;  
    orderStock[i] = count;  
    orderPrice[i] = priceTotal;  
    break;  
    }  
    }  
     
    System.*out*.print("Do you want input again? (y/n) : ");  
    String section = *sc*.nextLine();  
    switch (section){  
    case "y":  
    case "Y":  
    repeatSec = true;  
    break;  
    default:  
    System.*out*.println("-------------------------------------------");  
    System.*out*.println(" Order Data ");  
    System.*out*.println("-------------------------------------------");  
    System.*out*.println("By " + *user*);  
    System.*out*.printf("|");  
    System.*out*.printf("%-20s","Name");  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-7s","Count");  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-10s", "Price");  
    System.*out*.println("|");  
    for (int i = 0;i < orderName.length;i++){  
    if (orderName[i] != null){  
    System.*out*.printf("|");  
    System.*out*.printf("%-20s",orderName[i]);  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-7s",orderStock[i]);  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-10s", orderPrice[i]);  
    System.*out*.println("|");  
    }  
    }  
    System.*out*.println("-------------------------------------------");  
    int orderTotal = 0, payTotal = 0;  
    for (int i = 0 ; i < orderName.length ; i++){  
    orderTotal += orderStock[i];  
    payTotal += orderPrice[i];  
    }  
    System.*out*.printf("|");  
    System.*out*.printf("%-20s", "Total");  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-7s",orderTotal);  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-10s", payTotal);  
    System.*out*.println("|");  
    System.*out*.println("-------------------------------------------");  
    System.*out*.println();  
    repeatSec = false;  
    *mainSection* = true;  
    }  
    }  
    }  
    } while (repeatSec == true);  
    }  
     
    static void login(){  
    String username,pass;  
     
    *user* = null;  
    *password* = null;  
     
    System.*out*.print("Username : ");  
    username = *sc*.nextLine();  
    System.*out*.print("Password : ");  
    pass = *sc*.nextLine();  
     
    for(int i = 0 ; i < *member*.length ; i++){  
    if (*member*[i][0].equals(username)){  
    *user* = *member*[i][0];  
    if (*member*[i][1].equals(pass)){  
    *password* = *member*[i][1];  
    if (*member*[i][2] == "admin") {  
    *level* = "admin";  
    }else {  
    *level* = "user";  
    }  
    }else {  
    *password* = null;  
    }  
    }  
    }  
     
    }  
     
    static void tableData(){  
    System.*out*.printf("|");  
    System.*out*.printf("%-2s", "No");  
    System.*out*.printf("%-2s", "|");  
    System.*out*.printf("%-20s","Name");  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-7s","Stock");  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-10s","Price");  
    System.*out*.println("|");  
     
    if (*prescrip*[0] == null){  
    System.*out*.printf("|");  
    System.*out*.printf("%-2s", "-");  
    System.*out*.printf("%-2s", "|");  
    System.*out*.printf("%-20s","null");  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-7s","null");  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-10s","null");  
    System.*out*.println("|");  
    }else {  
    int num = 1;  
    for (int i = 0;i< *prescrip*.length;i++){  
    if (*prescrip*[i] != null){  
    System.*out*.printf("|");  
    System.*out*.printf("%-2s", num);  
    System.*out*.printf("%-2s", "|");  
    System.*out*.printf("%-20s",*prescrip*[i]);  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-7s",*stock*[i][0]);  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-10s",*stock*[i][1]);  
    System.*out*.println("|");  
    num++;  
    }  
    }  
    }  
    }  
     
    static void prescripData(){  
    int choice;  
    boolean sectionDataPres = false;  
     
    *line*();  
    System.*out*.println("Stock data");  
    *line*();  
    *tableData*();  
     
    do {  
    *line*();  
    if (*level* == "admin"){  
    System.*out*.println("Menu");  
    System.*out*.println("1. Add Stock");  
    System.*out*.println("2. Edit Price");  
    System.*out*.println("3. Back to Menu");  
    System.*out*.print("Choose (1-3) : ");  
    choice = *sc*.nextInt();  
    switch (choice){  
    case 1:  
    *addStock*();  
    *prescripData*();  
    break;  
    case 2:  
    *editPrice*();  
    *prescripData*();  
    break;  
    case 3:  
    sectionDataPres = false;  
    *mainSection* = true;  
    break;  
     
    default:  
    System.*out*.println("Please choose between 1-3");  
    sectionDataPres = true;  
    }  
    }else{  
    System.*out*.println("Menu");  
    System.*out*.println("1. Back to Menu");  
    System.*out*.print("Choose (1) : ");  
    choice = *sc*.nextInt();  
    switch (choice){  
    case 1:  
    sectionDataPres = false;  
    *mainSection* = true;  
    break;  
     
    default:  
    System.*out*.println("Please choose 1 for exit");  
    sectionDataPres = true;  
    }  
    }  
     
    }while (sectionDataPres == true);  
    }  
     
    static void tableMember(){  
    System.*out*.printf("|");  
    System.*out*.printf("%-2s", "No");  
    System.*out*.printf("%-2s", "|");  
    System.*out*.printf("%-15s","Username");  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-15s","Password");  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-7s","level");  
    System.*out*.println("|");  
     
    if (*member*[0] == null){  
    System.*out*.printf("|");  
    System.*out*.printf("%-2s", "-");  
    System.*out*.printf("%-2s", "|");  
    System.*out*.printf("%-15s","null");  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-15s","null");  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-7s","null");  
    System.*out*.println("|");  
    }else {  
    int num = 1;  
    for (int i = 0;i< *member*.length;i++){  
    if (*member*[i] != null){  
    System.*out*.printf("|");  
    System.*out*.printf("%-2s", num);  
    System.*out*.printf("%-2s", "|");  
    System.*out*.printf("%-15s",*member*[i][0]);  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-15s",*member*[i][1]);  
    System.*out*.printf("%-2s","|");  
    System.*out*.printf("%-7s",*member*[i][2]);  
    System.*out*.println("|");  
    num++;  
    }  
    }  
    }  
    }  
     
    static void memberData(){  
    int choice;  
    boolean sectionMember = false;  
     
    *line*();  
    System.*out*.println("Member Data");  
    *line*();  
     
    *tableMember*();  
     
    do {  
    System.*out*.println("Menu");  
    System.*out*.println("1. Back to Menu");  
    System.*out*.print("Choose (1) : ");  
    choice = *sc*.nextInt();  
    switch (choice){  
    case 1:  
    sectionMember = false;  
    *mainSection* = true;  
    break;  
    default:  
    System.*out*.println("Choose 1 for exit ");  
    sectionMember = true;  
    }  
    }while (sectionMember == true);  
     
    }  
     
    static void addStock(){  
    int a,addStock,arrLeng;  
    arrLeng = *prescrip*.length;  
    System.*out*.print("Choose the number of prescription (1-"+ arrLeng +") : ");  
    a = *sc*.nextInt();  
     
    int num = 1;  
    if(a > arrLeng){  
    System.*out*.println("Please choose between (1 - " + arrLeng + ") : ");  
    } else {  
    for (int i = 0;i < *prescrip*.length;i++){  
    if (a == num){  
    System.*out*.print("Enter stock : ");  
    addStock = *sc*.nextInt();  
    *stock*[i][0] += addStock;  
    }  
    num++;  
    }  
    }  
    }  
     
    static void editPrice(){  
    int a,price,arrLeng;  
    arrLeng = *prescrip*.length;  
    System.*out*.print("Choose the number of prescription (1-"+ arrLeng +") : ");  
    a = *sc*.nextInt();  
     
    int num = 1;  
    if(a > arrLeng){  
    System.*out*.println("Please choose between (1-" + arrLeng + ")");  
    } else {  
    for (int i = 0;i < *prescrip*.length;i++){  
    if (a == num){  
    System.*out*.print("Enter Price : ");  
    price = *sc*.nextInt();  
    *stock*[i][1] = price;  
    }  
    num++;  
    }  
    }  
    }  
     
    static int search(String key){  
    for(int i = 0; i< *prescrip*.length; i++){  
    if (*prescrip*[i] == null){  
    return -1;  
    }else {  
    if(*prescrip*[i].equals(key)){  
    return i;  
    }  
    }  
     
    }  
    return -1;  
    }  
     
    public static void main(String[] args) {  
    int choice;  
     
    *line*();  
    System.*out*.println(" WELCOME TO PHARMACY APK");  
    *line*();  
     
    do {  
    System.*out*.println("--- Login ---");  
    *login*();  
     
    if (*user* != null && *password* != null && *level* == "user"){  
    do {  
    *line*();  
    System.*out*.println("Welcome " + *user*);  
    *line*();  
    System.*out*.println("Menu");  
    System.*out*.println("1. Prescription Data");  
    System.*out*.println("2. Cashier");  
    System.*out*.println("3. Logout");  
    System.*out*.println("4. Exit");  
    System.*out*.print("Choose (1/2/3/4) : ");  
    choice = *sc*.nextInt();  
    *sc*.nextLine();  
     
    switch (choice){  
    case 1:  
    *prescripData*();  
    break;  
    case 2:  
    *cashier*();  
    break;  
    case 3:  
    *loginSection* = true;  
    *mainSection* = false;  
    break;  
    case 4:  
    *mainSection* = false;  
    *loginSection* = false;  
    break;  
    default:  
    System.*out*.println("Please choose between 1-4");  
    *mainSection* = true;  
    }  
     
    }while (*mainSection* == true);  
     
    }else if(*user* != null && *password* != null && *level* == "admin"){  
    do {  
    *line*();  
    System.*out*.println("Welcome " + *user* + " (Admin)");  
    *line*();  
    System.*out*.println("Menu");  
    System.*out*.println("1. Prescription Data");  
    System.*out*.println("2. Member Data");  
    System.*out*.println("3. Logout");  
    System.*out*.println("4. Exit");  
    System.*out*.print("Choose (1/2/3/4) : ");  
    choice = *sc*.nextInt();  
    *sc*.nextLine();  
     
    switch (choice){  
    case 1:  
    *prescripData*();  
    break;  
    case 2:  
    *memberData*();  
    break;  
    case 3:  
    *loginSection* = true;  
    *mainSection* = false;  
    break;  
    case 4:  
    *mainSection* = false;  
    *loginSection* = false;  
    break;  
    default:  
    System.*out*.println("Please choose between 1-4");  
    *mainSection* = true;  
    }  
    }while (*mainSection* == true);  
     
    } else if (*user* == null) {  
    System.*out*.println("| Username not found! |");  
    *loginSection* = true;  
    } else if (*password* == null && *user* != null) {  
    System.*out*.println("| Password wrong! |");  
    *loginSection* = true;  
    } else {  
    System.*out*.println("| Login error! |");  
    *loginSection* = true;  
    }  
    }while (*loginSection* == true);  
     
    }  
   }