AGRICULTURE MANAGEMENT SYSTEM

```
Code:
//package project;
import java.util.*;
import java.io.*;
//variable class
class variable {
  // All variables are declared globally
  ArrayList<Integer> P Id = new ArrayList<Integer>(); // Creating array list
object names as P Id
  ArrayList<String> P Name = new ArrayList<String>(); // Creating array list
object names as P_Name
  ArrayList<Integer> P Price = new ArrayList<Integer>(); // Creating array list
object names as P Price
  ArrayList<Integer> B Id = new ArrayList<Integer>(); // Creating array list
object names as B Id
  ArrayList<String> B_Name = new ArrayList<String>(); // Creating array list
object names as B Name
  ArrayList<Integer> B_Price = new ArrayList<Integer>(); // Creating array list
object names as B Price
  ArrayList<Integer> B Quantity = new ArrayList<Integer>(); // Creating array
list object names as B_Quantity
  int P Count = 0, i = 0, PID Modify = 0, PID Delete = 0, j = 0, c,
choice seller choice, main menu,
      choice_buyer_choice, Modified_Price, buy_products_buyer,
quantity buyer, choice, amount, total,
      null value number, counter = 0, seller count = 1, buyer count = 1; //
Variables
  // of int
  // data type
  char new_user_seller, new_user_buyer, con, condition; // Variables of char
data type
  String username seller, password seller, username buyer, password buyer;
// Variables of String data type
```

```
String full name seller signUp, user name seller signUp,
password_seller_signUp, address_seller_signUp,
      city seller signUp, state seller signUp, dob seller signUp,
email seller signUp, contact seller signUp;
  String full name buyer signUp, user name buyer signUp,
password buyer signUp, address buyer signUp,
      city_buyer_signUp, state_buyer_signUp, dob_buyer_signUp,
email_buyer_signUp, contact_buyer_signUp;
/* Inheriting variable class in Menu(Single level inheritance) */
class Menu extends variable {
  Scanner sc = new Scanner(System.in);
  public void menus() // menus function
  {
    System.out.print("\033[H\033[2J");
System.out.println("\n\t1. To Enter As A Seller Press 1");
    System.out.println("\n\t2. To Enter As A Buyer Press 2");
    System.out.println("\n\t3. To Exit Press 3");
   System.out.print("\n\tEnter Your Choice: ");
    choice = sc.nextInt();
    switch (choice) {
    case 1:
      System.out.print("\n\tAre You New Seller? (Press 'Y' For Yes And 'N' For
No): ");
      new_user_seller = sc.next().charAt(0);
      if (new_user_seller == 'y' | | new_user_seller == 'Y') {
        getData SignUp seller();
        getData SignIn seller();
        seller();
      }
      else if (new_user_seller == 'n' || new_user_seller == 'N') {
        getData SignIn seller();
        seller();
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}
     break;
    case 2:
     System.out.print("\n\tAre You New Buyer? (Press 'Y' For Yes And 'N' For
No): ");
      new user buyer = sc.next().charAt(0);
     if (new_user_buyer == 'y' | | new_user_buyer == 'Y') {
       getData_SignUp_buyer();
       getData SignIn buyer();
        buyer();
     } else if (new user buyer == 'n' || new user buyer == 'N') {
       getData_SignIn_buyer();
        buyer();
     }
     break;
    case 3:
     System.exit(0);
     break;
    default:
     System.out.print("Enter valid choice\n");
     break;
   }
  }
  public void getData SignIn seller() // getData SignIn seller function
   try {
     System.out.print("\033[H\033[2J");
System.out.print("\n\n\tEnter Username: ");
      username seller = sc.next();
     System.out.print("\tEnter Password: ");
      password seller = sc.next();
     FileWriter fw2 = new FileWriter("C:\\Users\\Admin\\My Drive\\SEM-
3\\OOP\\Project\\Seller Login History.txt", true);
      BufferedWriter bw2 = new BufferedWriter(fw2);
      bw2.write(
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"\n\n\t\t\t\t\t\t\t\t+************\n\t\t\t\t\t\t\tSELLER Login
bw2.write("\n\t\t\t\t\tUsername: " + username_seller);
     bw2.close();
     fw2.close();
   } catch (Exception e) {
     System.out.println("\n\tException Entered:" + e);
   }
 }
 public void getData_SignIn_buyer() // getData_SignIn_buyer function
 {
   try {
     System.out.print("\033[H\033[2J");
System.out.print("\n\n\tEnter Username: ");
     username buyer = sc.next();
     System.out.print("\tEnter Password: ");
     password buyer = sc.next();
     FileWriter fw3 = new FileWriter("C:\\Users\\Admin\\My Drive\\SEM-
3\\OOP\\Project\\Buyer_Login_History.txt", true);
     BufferedWriter bw3 = new BufferedWriter(fw3);
     bw3.write(
      bw3.write("\n\t\t\t\t\t\tUsername: " + username_buyer);
     bw3.close();
     fw3.close();
   } catch (Exception e) {
     System.out.println("\n\tException Entered:" + e);
   }
 }
 public void getData_SignUp_seller() // getData_SignUp_seller function
 {
   System.out.print("\033[H\033[2J");
```

```
System.out.println("\n\t\t\t\t^******************/n\t\t\t\t\t.
System.out.print("\n\n\tFull Name: ");
    full name seller signUp = sc.nextLine();
    sc.nextLine();
    System.out.print("\tUser Name: ");
    user name seller signUp = sc.next();
    if (user name seller signUp.equals("Stuti") | |
user name seller signUp.equals("Jinay")
        || user_name_seller_signUp.equals("Purav") ||
user_name_seller_signUp.equals("Sakshi")) {
      System.out.print("\tUsername Already Exist Press 1 To Enter New
Username Press 2 To Exit: ");
      c = sc.nextInt();
      switch (c) {
      case 1:
        getData SignUp seller();
        break;
      case 2:
        System.exit(0);
        break;
      default:
        System.out.print("\tWrong number entered\n");
        break;
      }
    }
    System.out.print("\tPassword: ");
    password seller signUp = sc.next();
    sc.nextLine();
    System.out.print("\tAddress: ");
    address seller signUp = sc.nextLine();
    System.out.print("\tCity: ");
    city seller signUp = sc.next();
    System.out.print("\tState: ");
    state seller signUp = sc.next();
    System.out.print("\tDOB: ");
    dob seller signUp = sc.next();
    System.out.print("\tEmail: ");
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```
email seller signUp = sc.next();
    System.out.print("\tContact: ");
    contact seller signUp = sc.next();
  }
  public void getData_SignUp_buyer() // getData_SignUp_buyer function
    System.out.print("\033[H\033[2J");
System.out.print("\n\n\tFull Name: ");
    full name buyer signUp = sc.nextLine();
    sc.nextLine();
    System.out.print("\tUser Name: ");
    user_name_buyer_signUp = sc.next();
    System.out.print("\tPassword: ");
    password buyer signUp = sc.next();
    sc.nextLine();
    System.out.print("\tAddress: ");
    address_buyer_signUp = sc.nextLine();
    System.out.print("\tCity: ");
    city_buyer_signUp = sc.next();
    System.out.print("\tState: ");
    state buyer signUp = sc.next();
    System.out.print("\tDOB: ");
    dob buyer signUp = sc.next();
    System.out.print("\tEmail: ");
    email buyer signUp = sc.next();
    System.out.print("\tContact: ");
    contact buyer signUp = sc.next();
  }
  public void seller() // seller function
  {
    if (((username_seller.equals("Stuti") | | username_seller.equals("Jinay") | |
username seller.equals("Purav")
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| username seller.equals("Sakshi")) &&
password_seller.equals("gnu123"))
        | | (username seller.equals(user name seller signUp)
             && password seller.equals(password seller signUp))) {
      seller choice();
    } else {
      System.out.print(
           "\n\tAccount Doesn't Exist Or Entered Username Or Password Are
Incorrect\n\tPress 1 To Create New Account\n\tPress 2 To Re Enter Username
And Password\n\tPress 3 To Exit\n\tEnter Your Choice: ");
      c = sc.nextInt();
      switch (c) {
      case 1:
        getData_SignUp_seller();
        getData SignIn seller();
        seller_choice();
        break;
      case 2:
        getData_SignIn_seller();
        seller();
        break;
      case 3:
        System.exit(0);
        return;
      default:
        System.out.print("\tWrong choice entered\n");
        break;
      }
    }
  }
  public void buyer() // buyer function
    if ((username buyer.equals("Stuti") | | username buyer.equals("Jinay") | |
username buyer.equals("Purav")
         | | username buyer.equals("Sakshi")) &&
password_buyer.equals("gnu123")
         | | (username buyer.equals(user name buyer signUp) &&
password_buyer.equals(password_buyer_signUp))) {
```

```
buyer_choice();
    } else {
     System.out.print(
         "\n\tAccount Doesn't Exist Or Entered Username Or Password Are
Incorrect\n\tPress 1 To Create New Account\n\tPress 2 To Re Enter Username
And Password\n\tPress 3 To Exit\n\tEnter Your Choice: ");
     c = sc.nextInt();
     switch (c) {
     case 1:
       getData SignUp buyer();
       getData SignIn buyer();
       buyer_choice();
       break;
     case 2:
       getData_SignIn_buyer();
       buyer();
       break;
     case 3:
       System.exit(0);
       return;
     default:
       System.out.print("\tWrong Choice Entered\n");
       break;
     }
   }
  }
  public void seller choice() // seller choice function
 {
    System.out.print("\033[H\033[2J");
System.out.println("\n\t1. CREATE PRODUCT");
    System.out.println("\n\t2. MODIFY PRODUCT");
    System.out.println("\n\t3. DELETE PRODUCT");
   System.out.println("\n\t4. VIEW ALL PRODUCTS");
   System.out.println("\n\t5. BACK TO MAIN MENU");
    System.out.print("\n\tEnter Your Choice: ");
```

```
choice seller choice = sc.nextInt();
   switch (choice_seller_choice) {
   case 1:
     create_product();
     break;
   case 2:
     modify_product();
     view products();
     break;
   case 3:
     delete_product();
     break;
   case 4:
     view_products();
     break;
   case 5:
     menus();
     break;
   default:
     System.out.println("Invalid Choice !!!");
     break;
   }
 }
 public void create_product() // create_product function
   System.out.print("\033[H\033[2J");
   System.out.println(
       while (con != 'n') {
     System.out.print("\n\tEnter How Much Items You Want To Insert: ");
     P_Count = sc.nextInt();
```

```
for (i = 0; i < P Count; i++) {
        System.out.print("\n\tEnter Product " + (i + 1) + " Id: ");
        P Id.add(sc.nextInt());
        System.out.print("\tEnter Product " + (i + 1) + " Name: ");
        P Name.add(sc.next());
        System.out.print("\tEnter Product " + (i + 1) + " Price(Per kg): ");
        P Price.add(sc.nextInt());
      System.out.print("\n\tDo You Want To Create New Product(Press y for
yes and n for no):");
      con = sc.next().charAt(0);
    con = 0;
    try {
      FileWriter fw4 = new FileWriter("C:\\Users\\Admin\\My Drive\\SEM-
3\\OOP\\Project\\All_Products.txt", true);
      BufferedWriter bw4 = new BufferedWriter(fw4);
      bw4.write(
          bw4.write("\n\t\t\tPID\t\tPRODUCT\ NAME\t\tPRICE\n");
      for (int i = 0; i < P_Id.size(); i++) {
        bw4.write("\n\t\t\t" + P_Id.get(i) + "\t\t" + P_Name.get(i) + "\t\t"
+ P Price.get(i));
      bw4.close();
      fw4.close();
    } catch (Exception e) {
      System.out.println("Exception catched:" + e);
    }
    System.out.print("\n\tPress 1 For Return To Main Menu and Press 2 to
Exit: ");
    main menu = sc.nextInt();
    switch (main menu) {
    case 1:
      seller_choice();
      break;
    case 2:
      System.exit(0);
```

```
break;
    default:
     System.out.print("\n\tWrong Number Entered");
     break;
   }
  }
  public void modify_product() // modify_product function
   System.out.print("\033[H\033[2J");
    System.out.println(
        if (P \ Id.size() == 0) \{
     System.out.print(
          "\n\tYou Didn't Created Any Products.\n\n\tIf You Want To Create
Product Press 1 and Press 2 to exit: ");
      null value number = sc.nextInt();
     switch (null value number) {
     case 1:
       create_product();
       break;
     case 2:
       System.exit(0);
       break;
     default:
       System.out.println("\tWrong Choice !!!!");
       break;
   } else {
     System.out.println("\n\t\tPID\t\tPRODUCT NAME\t\tPRICE");
     for (int i = 0; i < P Id.size(); i++) {
       System.out.println("\t\t" + P_Id.get(i) + "\t\t" + P_Name.get(i) +
"\t\t\t" + P Price.get(i));
     }
     System.out.print("\n\tEnter Product's Number Which You Want To
Change: ");
     PID Modify = sc.nextInt();
```

```
System.out.print("\n\tEnter New Price: ");
     Modified_Price = sc.nextInt();
     for (i = 0; i < P Id.size(); i++) {
       if (P Id.get(i) == PID Modify) {
         P Price.set(i, Modified Price);
       }
     }
     System.out.print("\n\tPress 1 For Return To Main Menu and Press 2 to
Exit: ");
     main menu = sc.nextInt();
     switch (main menu) {
     case 1:
       seller choice();
       break;
     case 2:
       System.exit(0);
       break;
     default:
       System.out.print("\n\tWrong Number Entered");
       break;
     }
   }
 }
  public void delete product() // delete product function
 {
   System.out.print("\033[H\033[2J");
    System.out.println(
       if (P_Id.size() == 0) {
     System.out.print("\n\tYou Didn't Created Any Products.\n\n\tIf You
Want To Create Product Press 1: ");
     null value number = sc.nextInt();
     switch (null value number) {
     case 1:
       create_product();
       break;
     case 2:
```

```
System.exit(0);
         break;
      default:
         System.out.println("\tWrong Choice Entered");
         break;
      }
    } else {
      System.out.println("\n\t\tPID\t\tPRODUCT NAME\t\tPRICE");
      for (int i = 0; i < P Id.size(); i++) {
         System.out.println(
             ''\t\t" + P Id.get(i) + "\t\t" + P Name.get(i) + "\t\t" +
P_Price.get(i));
      System.out.print("\n\tEnter Product's Number Which You Want To
Delete: ");
      PID Delete = sc.nextInt();
      for (i = 0; i < P_Id.size(); i++) {
         if (P Id.get(i) == PID Delete) {
           i = i;
           break;
         }
      }
      P Id.remove(j);
      P_Price.remove(j);
      P Name.remove(j);
      System.out.println("\n\t\tPID\t\tPRODUCT NAME\t\tPRICE");
      for (int i = 0; i < P Id.size(); i++) {
         System.out.println("\t\t" + P Id.get(i) + "\t\t" + P Name.get(i) +
"\t\t" + P_Price.get(i));
      System.out.print("\n\tPress 1 For Return To Main Menu and Press 2 to
Exit: ");
       main menu = sc.nextInt();
      switch (main menu) {
      case 1:
         seller choice();
         break;
      case 2:
         System.exit(0);
         break;
```

```
default:
       System.out.print("\n\tWrong Number Entered");
       break;
     }
    }
 }
  public void view products() // view products function
   System.out.print("\033[H\033[2J");
    System.out.println(
        if (P \ Id.size() == 0) \{
     System.out.print("\n\tYou Didn't Created Any Products.\n\n\tIf You
Want To Create Product Press 1: ");
      null value number = sc.nextInt();
     if (null value number == 1) {
       create product();
     } else {
        System.out.println("Wrong Choice Entered");
   } else {
     System.out.println("\n\t\tPID\t\tPRODUCT NAME\t\tPRICE");
     for (int i = 0; i < P Id.size(); i++) {
       System.out.println("\t\t" + P Id.get(i) + "\t\t" + P Name.get(i) +
"t\t'' + P Price.get(i));
     System.out.print("\n\tPress 1 For Return To Main Menu and Press 2 to
Exit: ");
      main menu = sc.nextInt();
     switch (main menu) {
     case 1:
       seller choice();
       break;
     case 2:
       System.exit(0);
       break;
     default:
```

```
System.out.print("\n\tWrong Number Entered");
       break;
     }
   }
 }
 public void buyer_choice() // buyer_choice function
   System.out.print("\033[H\033[2J");
System.out.println("\n\t1. VIEW ALL PRODUCTS");
   System.out.println("\n\t2. BUY PRODUCTS");
   System.out.println("\n\t3. VIEW CART AND BILL");
   System.out.println("\n\t4. BACK TO MAIN MENU");
   System.out.print("\n\tEnter Your Choice: ");
   choice buyer choice = sc.nextInt();
   switch (choice buyer choice) {
   case 1:
     view_products_buyer();
     break;
   case 2:
     buy products();
     break;
   case 3:
     view cart();
     break;
   case 4:
     menus();
     break;
   default:
     System.out.println("Wrong Number Entered");
     break;
   }
 }
```

```
public void view_products_buyer() // view_products_buyer function
    System.out.print("\033[H\033[2J");
    System.out.println(
       if (P Id.size() == 0) {
     System.out.print("\n\tSorry We Don't Have Any Products For You Right
Now.");
    }
    else {
     System.out.println("\n\t\tPID\t\tPRODUCT NAME\t\tPRICE");
     for (int i = 0; i < P Id.size(); i++) {
       System.out.println("\t\t" + P Id.get(i) + "\t\t" + P Name.get(i) +
"\t\t\t" + P_Price.get(i));
     System.out.print("\n\tPress 1 For Return To Main Menu Press 2 to Exit:
");
     main menu = sc.nextInt();
     switch (main_menu) {
     case 1:
       buyer_choice();
       break;
     case 2:
       System.exit(0);
       break;
     default:
       System.out.print("\n\tWrong Number Entered");
       break;
     }
   }
  public void buy_products() // buy_products function
 {
    con = 0;
   System.out.print("\033[H\033[2J");
```

```
if (P Id.size() == 0) {
      System.out.print("\n\tSorry We Don't Have Any Products For You Right
Now.");
    } else {
      System.out.println("\n\n\t\tPID\t\tPRODUCT NAME\t\tPRICE");
      for (int i = 0; i < P Id.size(); i++) {
        System.out.println("\t\t" + P Id.get(i) + "\t\t" + P Name.get(i) +
"\t\t" + P Price.get(i));
      }
      while (con != 'n') {
        System.out.print("\n\tEnter PID You Want To Buy: ");
        buy products buyer = sc.nextInt();
        for (i = 0; i < P | Id.size(); i++) {
          if (buy_products_buyer == P_Id.get(i)) {
            counter++;
          }
        if (counter == 0) {
          System.out.print(
              "\n\tEntered PID Does Not Exist \n\tPress Y To Enter Again N
To Go Back To Main Menu: ");
          condition = sc.next().charAt(0);
          if (condition == 'y' | | condition == 'Y') {
            buy products();
          } else if (condition == 'n' || condition == 'N') {
            buyer choice();
          } else {
            System.out.println("\n\tWrong Choice Entered");
          }
        counter = 0;
        System.out.print("\n\tEnter Quantity: ");
        quantity buyer = sc.nextInt();
        for (i = 0; i < P | Id.size(); i++) {
          if (buy_products_buyer == P_Id.get(i)) {
            amount = P_Price.get(i) * quantity_buyer;
            total += amount;
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```
B Id.add(P Id.get(i));
            B_Name.add(P_Name.get(i));
            B Quantity.add(quantity buyer);
            B Price.add(amount);
         }
        }
        System.out.print("\n\tDo You Want To Buy Another Product (Press y
For Yes And n For No):");
        con = sc.next().charAt(0);
      }
    }
    con = 0;
    System.out.print("\n\tPress 1 For Return To Main Menu: ");
    main menu = sc.nextInt();
    switch (main menu) {
    case 1:
      buyer_choice();
      break;
    default:
      System.out.print("\n\tWrong Number Entered");
      break;
    }
  }
  public void view cart() // view cart function
  {
    try {
      if (B_Id.size() != 0) {
        System.out.print("\033[H\033[2J");
System.out.println("\n\n\t\tPID\t\tPRODUCT
NAME\t\tQUANTITY\t\tPRICE");
        for (int i = 0; i < B Id.size(); i++) {
          System.out.println("\t\t" + B Id.get(i) + "\t\t" + B Name.get(i) +
"\t\t" + B Quantity.get(i)
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+ "\t\t\t" + B Price.get(i));
      }
      FileWriter fw1 = new FileWriter("C:\\Users\\Admin\\My Drive\\SEM-
3\\OOP\\Project\\bill.txt");
      BufferedWriter bw1 = new BufferedWriter(fw1);
      bw1.write(
bw1.write("\n\n\t\t\tPID\t\tPRODUCT
NAME\t\tQUANTITY\t\tPRICE");
     for (int i = 0; i < B_Id.size(); i++) {
       bw1.write("\n\t\t" + B\_Id.get(i) + "\t\t" + B\_Name.get(i) + "\t\t"
+ B_Quantity.get(i)
          + "\t\t" + B Price.get(i));
      bw1.close();
     fw1.close();
      FileWriter fw = new FileWriter("C:\\Users\\Admin\\My Drive\\SEM-
3\\OOP\\Project\\Bill_All_Records.txt.txt", true);
      BufferedWriter bw = new BufferedWriter(fw);
      bw.write(
bw.write("\n\n\t\tPRODUCT NAME\t\tQUANTITY\t\tPRICE");
     for (int i = 0; i < B Id.size(); i++) {
       B_Quantity.get(i) + "\t\t\t"
          + B Price.get(i));
      bw.close();
     fw.close();
     System.out.print("\n\tPress 1 For Return To Main Menu and Press 2
to Exit: ");
      main menu = sc.nextInt();
      switch (main_menu) {
```

```
case 1:
           buyer_choice();
           break;
        case 2:
           System.exit(0);
           break;
        default:
           System.out.print("\n\tWrong Number Entered");
           break;
        }
      } else {
        System.out.println("Your Cart Is Empty.");
        System.out.print("\n\tPress 1 For Return To Main Menu and Press 2
to Exit: ");
        main_menu = sc.nextInt();
        switch (main menu) {
        case 1:
           buyer_choice();
           break;
        case 2:
           System.exit(0);
           break;
        default:
           System.out.print("\n\tWrong Number Entered");
           break;
        }
      }
    } catch (Exception e) {
      System.out.println("\n\tException Entered:" + e);
    }
  }
}
public class Project {
  public static void main(String[] args) // main function
  {
    Menu men1 = new Menu(); // Creating object of Menu class as men1
    men1.menus();
  }
}
```