package adressregister;  
  
import static gdi.MakeItSimple.readInt;  
import static gdi.MakeItSimple.readLine;  
  
public class AdressRegister {  
  
 public static void main(String[] args) {  
 int userInput = 0;  
 boolean isInputValid = true;  
 AdressRegister adressReg = new AdressRegister();  
   
 do {  
 userInput = getUserOperation();  
   
 switch(userInput) {  
 case 1:  
 insertAdress(adressReg);  
 break;  
 case 2:  
 deleteAdress(adressReg);  
 break;  
 case 3:   
 System.out.println(adressReg);  
 break;  
 default:  
 exit();  
 isInputValid = false;  
 break;  
 }  
   
 } while(isInputValid);  
 }  
   
 public static void insertAdress(AdressRegister adressRegister) {  
 int position = getPosition();  
 String newAdress = getNewName();  
 adressRegister.insert(position, newAdress);  
 }  
   
 public static void deleteAdress(AdressRegister adressRegister) {  
 int position = getPosition();  
 adressRegister.delete(position);  
 }  
   
 public static int getUserOperation() {  
 int userOperation = -1;  
 System.out.println("1. Einfügen\n2. Löschen\n3. Anzeigen");  
 userOperation = readInt();  
 return userOperation;  
 }  
   
 public static int getPosition() {  
 int position = -1;  
 System.out.println("Gebe eine Position an: ");  
 position = readInt();  
 return position;  
 }  
   
 public static String getNewName() {  
 String newName = "";  
 System.out.println("Gebe einen neuen Namen ein: ");  
 readLine();  
 newName = readLine();  
 return newName;  
 }  
   
 public static void exit() {  
 System.out.println("Programm wird beendet.");  
 }  
   
 private String[] adressList;  
   
 public AdressRegister() {  
 this.adressList = new String[5];  
 this.adressList[0] = "Andreas";  
 this.adressList[1] = "Bernd";  
 this.adressList[2] = "Carsten";  
 this.adressList[3] = "Dennis";  
 this.adressList[4] = "Emil";  
 }  
   
 public void delete(int position) {  
 int currentNumberOfAdresses = this.adressList.length;  
 String[] newAdressList = new String[currentNumberOfAdresses - 1];  
   
 if(position >= newAdressList.length) {  
 System.out.println("Position ungültig.");  
 return;  
 }  
   
 for(int i = 0, j = 0; i < currentNumberOfAdresses; i++) {  
 if(i+1 != position) {  
 newAdressList[j++] = this.adressList[i];  
 }  
 }  
   
 this.adressList = newAdressList;  
   
 System.out.println(this);  
 }  
   
 public void insert(int position, String value) {  
 int currentNumberOfAdresses = this.adressList.length;  
 String[] newAdressList = new String[currentNumberOfAdresses + 1];  
   
 if(position >= newAdressList.length) {  
 System.out.println("Position ungültig.");  
 return;  
 }  
   
 for(int i = 0, j = 0; i < currentNumberOfAdresses + 1; i++) {  
 if(i+1 == position) {  
 newAdressList[i] = value;  
 } else {  
 newAdressList[i] = this.adressList[j++];  
 }  
 }  
   
 this.adressList = newAdressList;  
   
 System.out.println(this);  
 }  
   
 @Override  
 public String toString() {  
 String outputStr = "";  
 outputStr += "Anzahl Adressen: " + this.adressList.length + "\n";  
 int end = this.adressList.length;  
   
 for(int i = 0; i < end; i++) {  
 outputStr += this.adressList[i] + (i < end - 1 ? ", " : "");  
 }  
   
 return outputStr;  
 }  
  
}