import java.util.Scanner;

public class Assignment {

// Main Method

public static void main(String[] args) {

System.out.println("MAIN MENU");

System.out.println("Student ID: " + "1795000");

System.out.println("Student Name: " + "Pooja Patel");

System.out.println();

System.out.println();

System.out.println("1. Display the List");

System.out.println("2. Insert an element");

System.out.println("3. Swap two elements");

System.out.println("4. Quit");

System.out.println();

System.out.println();

Scanner sc = new Scanner(System.in);

System.out.println("Your Choice ?");

int c = sc.nextInt();

if (c == 1)

optionDisplay();

if (c == 2)

optionInsert();

if (c == 3)

optionSwap();

if (c==4)

quit();

}

// Quit Method

private static void quit() {

System.exit(0);

}

// Swap Method

public static void optionSwap() {

System.out.println("SWAP TWO ELEMENTS");

String[] nameList = vectorPrint();

for (int i = 0; i < nameList.length; i++) {

System.out.println(i + 1 + "." + nameList[i]);

}

System.out.println();

System.out.println();

Scanner sc1 = new Scanner(System.in);

System.out.println("From Element?");

int from = sc1.nextInt();

Scanner sc2 = new Scanner(System.in);

System.out.println("To Element?");

int to = sc2.nextInt();

String temp;

temp = nameList[from-1];

nameList[from-1]=nameList[to-1];

nameList[to-1] = temp;

String result[] = nameList;

for (int i = 0; i < result.length; i++) {

System.out.println(i + 1 + "." + result[i]);

}

menuPrint(nameList);

}

// Insert Method

public static void optionInsert() {

System.out.println("INSERT AN ELEMENT");

String[] nameList = vectorPrint();

for (int i = 0; i < nameList.length; i++) {

System.out.println(i + 1 + "." + nameList[i]);

}

System.out.println();

System.out.println();

Scanner sc1 = new Scanner(System.in);

System.out.println("Where to insert element ?");

int position = sc1.nextInt();

Scanner sc2 = new Scanner(System.in);

System.out.println("Enter the name: ");

String name = sc2.next();

String[] result = new String[nameList.length];

for (int i = 0; i < position; i++)

result[i] = nameList[i];

result[position - 1] = name;

for (int j = position; j < nameList.length; j++)

result[j] = nameList[j - 1];

for (int i = 0; i < result.length; i++) {

System.out.println(i + 1 + "." + result[i]);

}

menuPrint(nameList);

}

// Display Method

public static void optionDisplay() {

System.out.println("LIST CONTENT");

String[] nameList = vectorPrint();

for (int i = 0; i < nameList.length; i++) {

System.out.println(i + 1 + "." + nameList[i]);

}

System.out.println();

System.out.println();

menuPrint(nameList);

}

// Menu Print Method

public static void menuPrint(String[] nameList) {

System.out.println("Press ENTER to Continue ");

Scanner scanner = new Scanner(System.in);

String readString = scanner.nextLine();

if (readString.isEmpty()) {

System.out.println("Read Enter Key.");

main(nameList);

}

}

// Vector Print Method

public static String[] vectorPrint() {

String[] nameList = new String[10];

nameList[0] = "Jonathan";

nameList[1] = "Roxanne";

nameList[2] = "Jasmine";

nameList[3] = "Sophianne";

nameList[4] = " ";

nameList[5] = " ";

nameList[6] = " ";

nameList[7] = " ";

nameList[8] = " ";

nameList[9] = " ";

return nameList;

}

}