import java.util.Scanner;  
  
public class Solution {  
  
 public static boolean DishX(String arr[], int numberOfDays) {  
 int fat = 0;  
 int carb = 0;  
 int fiber = 0;  
 boolean dishX = false;  
 int fatLoop = 0;  
 int carbLoop = 0;  
 int fiberLoop = 0;  
  
  
 for (int i = 0; i < numberOfDays; i++) {  
 if (arr[i].contains("FAT"))  
 fat++;  
 else if (arr[i].contains("CARB"))  
 carb++;  
 else if (arr[i].contains("FIBER"))  
 fiber++;  
  
 if ((fat >= 2 && fiber >= 2)) {  
 dishX = true;  
 fatLoop = 2;  
 fiberLoop = 2;  
 break;  
 }  
 if ((fat >= 3 && fiber >= 1)) {  
 dishX = true;  
 fatLoop = 3;  
 fiberLoop = 1;  
 break;  
 }  
 if ((fat >= 4)) {  
 dishX = true;  
 fatLoop = 4;  
 break;  
 }  
 }  
  
 if (dishX == true) {  
 if (fatLoop == 2 && fiberLoop == 2) {  
 for (int i = 0; i < numberOfDays; i++) {  
 if (arr[i].contains("FAT") && fatLoop > 0) {  
 arr[i] = null;  
 fatLoop--;  
 }  
  
 if (arr[i].contains("FIBER") && fiberLoop > 0) {  
 arr[i] = null;  
 fiberLoop--;  
 }  
 }  
  
 }  
  
 if (fatLoop == 3 && fiberLoop == 1) {  
 for (int i = 0; i < numberOfDays; i++) {  
 if (arr[i].contains("FAT") && fatLoop > 0) {  
 arr[i] = null;  
 fatLoop--;  
 }  
  
 if (arr[i].contains("FIBER") && fiberLoop > 0) {  
 arr[i] = null;  
 fiberLoop--;  
 }  
 }  
  
 }  
  
 if (fatLoop == 4) {  
 for (int i = 0; i < numberOfDays; i++) {  
 if (arr[i].contains("FAT") && fatLoop > 0) {  
 arr[i] = null;  
 fatLoop--;  
 }  
 }  
 }  
 }  
  
 return true;  
  
 }  
  
 public static boolean DishY(String arr[], int numberOfDays) {  
 int fat = 0;  
 int carb = 0;  
 int fiber = 0;  
 boolean dishY = false;  
 int fatLoop = 0;  
 int carbLoop = 0;  
 int fiberLoop = 0;  
  
  
 for (int i = 0; i < numberOfDays; i++) {  
 if (arr[i].contains("FAT"))  
 fat++;  
 else if (arr[i].contains("CARB"))  
 carb++;  
 else if (arr[i].contains("FIBER"))  
 fiber++;  
  
 if ((carb >= 1 && fiber >= 3)) {  
 dishY = true;  
 carbLoop = 1;  
 fiberLoop = 3;  
 break;  
 }  
 if ((carb >= 2 && fiber >= 2)) {  
 dishY = true;  
 carbLoop = 2;  
 fiberLoop = 2;  
 break;  
 }  
 if ((carb >= 3 && fiber >= 1)) {  
 dishY = true;  
 carbLoop = 3;  
 fiberLoop = 1;  
 break;  
 }  
 }  
  
 if (dishY == true) {  
 if (carbLoop == 1 && fiberLoop == 3) {  
 for (int i = 0; i < numberOfDays; i++) {  
 if (arr[i].contains("CARB") && carbLoop > 0) {  
 arr[i] = null;  
 carbLoop--;  
 }  
  
 if (arr[i].contains("FIBER") && fiberLoop > 0) {  
 arr[i] = null;  
 fiberLoop--;  
 }  
 }  
  
 }  
  
 if (carbLoop == 2 && fiberLoop == 2) {  
 for (int i = 0; i < numberOfDays; i++) {  
 if (arr[i].contains("CARB") && carbLoop > 0) {  
 arr[i] = null;  
 carbLoop--;  
 }  
  
 if (arr[i].contains("FIBER") && fiberLoop > 0) {  
 arr[i] = null;  
 fiberLoop--;  
 }  
 }  
  
 }  
  
 if (carbLoop == 3 && fiberLoop == 1) {  
 for (int i = 0; i < numberOfDays; i++) {  
 if (arr[i].contains("CARB") && carbLoop > 0) {  
 arr[i] = null;  
 carbLoop--;  
 }  
 if (arr[i].contains("FIBER") && fiberLoop > 0) {  
 arr[i] = null;  
 fiberLoop--;  
 }  
 }  
 }  
 }  
  
 return true;  
  
 }  
  
 public static void main(String[] args) {  
 Scanner kb = new Scanner(System.*in*);  
  
 int numberOfDays = kb.nextInt();  
  
 String arr[] = new String[numberOfDays];  
  
 for (int i = 0; i < numberOfDays; i++) {  
 arr[i] = kb.next();  
 }  
  
 for (int i = 0; i < numberOfDays; i++) {  
 boolean x = Solution.*DishX*(arr, i);  
 boolean y = Solution.*DishY*(arr, i);  
  
 if (x == true)  
 System.*out*.print("X");  
 else if (y == true)  
 System.*out*.print("Y");  
 else  
 System.*out*.print("-");  
 }  
 }  
}