```java
import java.util.ArrayList;
import java.util.Scanner;


public class Dive {
        static Scanner sc = new Scanner(System.in);
        public static void main(String[] args) {
                ArrayList<Picture> list = new ArrayList<Picture>();

                Dive dive = new Dive();

                Picture picture = readInput(dive);
                while(picture != null) {
                        list.add(picture);
                        picture = readInput(dive);
                }
                int size = list.size();
                for(int i = 0; i < size; i++) {
                        list.get(i).writePicture3();
                }

        }

        public static Picture readInput(Dive dive) {
                Picture picture;

                int y = sc.nextInt();
                int x = sc.nextInt();
                String str = sc.next().replace("'", " ").trim();

                if(y == 0) {
                        //System.out.println("Konec");
                        return null;

                }

                sc.nextLine();

                char[][] picture1 = readPicture(y, x);
                sc.nextLine();
                char[][] picture2 = readPicture(y, x);
                sc.nextLine();

                picture = dive.new Picture(y, x, str.charAt(0), picture1, picture2);

                //System.out.println(picture);

                return picture;
```

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49:         }
50:
51:         public static char[][] readPicture(int y, int x) {
52:                 char[][] picture = new char[y][];
53:
54:                 for(int i = 0; i < y; i++) {
55:                         String str = sc.nextLine();
56:                         //System.out.println(str);
57:                         picture[i] = str.toCharArray();
58:                 }
59:
60:                 return picture;
61:         }
62:
63:         class Picture {
64:                 int y;
65:                 int x;
66:                 char ch;
67:                 char[][] picture1;
68:                 char[][] picture2;
69:                 char[][] picture3;
70:                 char[][] figure1;
71:                 char[][] figure2;
72:                 int velocityX;
73:                 int velocityY;
74:                 int firstX;
75:                 int firstY;
76:                 int secondX;
77:                 int secondY;
78:
79:                 public Picture(int y, int x, char ch, char[][] picture1, char[][] picture2) {
80:                         this.y = y;
81:                         this.x = x;
82:                         this.ch = ch;
83:                         this.picture1 = picture1;
84:                         this.picture2 = picture2;
85:                         this.figure1 = separateFigure(picture1, false);
86:                         this.figure2 = separateFigure(picture2, true);
87:                         calculateVelocities();
88:                         calculatePicture3();
89:                 }
90:
91:                 public char[][] separateFigure(char[][] picture, boolean second) {
92:                         char[][] figure = new char[y][x];
93:                         boolean first = true;
94:
95:                         for(int i = 0; i < y; i++) {
96:                                 for(int j = 0; j < x; j++) {
```

```
97:                                     if(picture[i][j] == ch) {
98:                                             figure[i][j] = ch;
99:
100:                                            if(first){
101:                                                    first = false;
102:                                                    if(second) {
103:                                                            this.secondX = j;
104:                                                            this.secondY = i;
105:                                                    } else {
106:                                                            this.firstX = j;
107:                                                            this.firstY = i;
108:                                                    }
109:                                            }
110:                                    }
111:                            }
112:                    }
113:
114:                    return figure;
115:            }
116:
117:            public void calculateVelocities() {
118:                    this.velocityX = this.secondX - this.firstX;
119:                    this.velocityY = this.secondY - this.firstY;
120:            }
121:
122:            public void calculatePicture3() {
123:                    this.picture3 = new char[y][x];
124:
125:                    for(int i = this.secondY; i < y; i++) {
126:                            for(int j = this.secondX; j < x; j++) {
127:                                    if(this.figure2[i][j] == this.ch) {
128:                                            int possitionY = i + this.velocityY;
129:                                            int possitionX = j + this.velocityX;
130:                                            //System.out.println(possitionX + " " + possitionY);
131:
132:                                            if(possitionX < x && possitionX >= 0 && possitionY < y && possitionY >= 0) {
133:                                                    this.picture3[possitionY][possitionX] = this.ch;
134:                                            }
135:                                    } else {
136:                                            this.picture3[i][j] = (char) 5;
137:                                    }
138:                            }
139:                    }
140:
141:                    for(int i = 0; i < y; i++) {
142:                            for(int j = 0; j < x; j++) {
143:                                    //System.out.print(picture3[i][j]);
144:                                    if(picture3[i][j] != this.ch) {
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145:                                            if(picture1[i][j] != this.ch) {
146:                                                    picture3[i][j] = picture1[i][j];
147:                                            } else {
148:                                                    picture3[i][j] = picture2[i][j];
149:                                            }
150:                                    }
151:                            }
152:                            //System.out.println();
153:                    }
154:            }
155:
156:            public void writePicture3() {
157:                    for(int i = 0; i < y; i++) {
158:                            for(int j = 0; j < x; j++) {
159:                                    System.out.print(picture3[i][j]);
160:                            }
161:                            System.out.println();
162:                    }
163:                    System.out.println();
164:            }
165:    }
166: }
167:
168:
```