


```

64         1][k].equals(letters.get(1))) // BC
65         || (matrix[j][0].equals(letters.get(0))
66             && matrix[j][matrix.length -
67             1].equals(letters.get(1))) // BD
68         || (matrix[matrix.length -
69             1][k].equals(letters.get(0))
70             && matrix[j][matrix.length -
71             1].equals(letters.get(1))) // CD
72     ) {
73         matrix[j][k] = "X";
74     }
75 }
76 }
77 } else if (letters.size() == 3) {
78     for (int j = 1; j < matrix.length - 1; j++) {
79         for (int k = 1; k < matrix[0].length - 1; k++) {
80             if ((matrix[0][k].equals(letters.get(0)) &&
81                 matrix[j][0].equals(letters.get(1))
82                 && matrix[matrix.length -
83                 1][k].equals(letters.get(2))) // ABC
84                 || (matrix[0][k].equals(letters.get(0))
85                     && matrix[matrix.length -
86                     1][k].equals(letters.get(1))
87                     && matrix[j][matrix.length -
88                     1].equals(letters.get(2))) // ACD
89                 || (matrix[j][0].equals(letters.get(0))
90                     && matrix[matrix.length -
91                     1][k].equals(letters.get(1))
92                     && matrix[j][matrix.length -
93                     1].equals(letters.get(2))) // BCD
94                 || matrix[0][k].equals(letters.get(0)) &&
95                 matrix[j][0].equals(letters.get(1))
96                 && matrix[j][matrix.length -
97                 1].equals(letters.get(2))) // ABD
98             {
99                 matrix[j][k] = "X";
100             }
101         }
102     }
103 }
104 }
105 }
106 }
107 }
108 String output = "";
109 String s = "";
110 for (int i = 1; i < matrix.length - 1; i++) {
111     for (int j = 1; j < matrix[0].length - 1; j++) {
112         if (matrix[i][j].equals("X")) {
113             s += 1;
114         } else {
115             s += 0;
116         }
117     }

```

```
118         int decimal = Integer.parseInt(s, 2);
119         String hexStr = Integer.toString(decimal, 16).toUpperCase();
120         output += hexStr;
121         s = "";
122     }
123     System.out.println(output);
124 }
125 }
126
127 }
```