B. otherwise mark this direction as blocked
C. if all other 3 directions are blocked add t to B

ii. add t references to appropriate DirectionInfo.IsBlocking of all tiles by which it is blocked
iii. if t is not in B add references of all tiles by which t is blocked
iv. if there is no such tiles add t to F.

4. in recursive manner (basing on B) add all other pieces that are blocked to B and update DirectionInfos of dependent tiles.

5. calculate the measure of open possibilities.

6. get final score on the basis of calculated parameters. //exact formula has to be found by practice

3.3.2 Complexity

Steps 1. 2. and 6. need constant number of operation. Steps 3. and 4. are in worst case [board of size 1 by n or n by 1] $O(n^3)$ and step 5. is $O(n)$.

The total complexity is $O(n^3)$, but it strongly depends on the number of tiles which never cannot be removed.

4 IO files formats

4.1 Input file format

The input file should be defined as a *.txt file in the following manner:

- the first line contains a string representing the dimensions of the board (x-first, y-second) separated by the semicolon ';',
- all the following lines should be devoted for a single tile each.
- every two cells in the row containing the information about particular tile should be separated by the semicolon ';'
- first cell: information about the orientation of the tile: 'h' for horizontal, 'v' for vertical.

- second cell: the NW value of the tile - in the case of horizontal tile: the left value, in the case of vertical one: the upper value,
- third cell: the SE value of the tile - in the case of horizontal tile: the right value, in the case of vertical one: the lower value,
- fourth cell: the X-position of the NW tile on the board,
- fifth cell: the Y-position of the SE tile on the board.

Example:

```
5;4
v;2;1;0;0
h;1;0;1;0
h;3;3;3;0
v;3;0;1;1
v;1;1;2;1
v;0;2;3;1
v;4;4;4;1
v;3;2;0;2
h;0;0;1;3
h;2;2;3;3
```

Such an input creates the board with the dimensions [X, Y] = [5, 4], consisting of the following tiles ([NWvalue, SEvalue],[X-position, Y-position],[vertical/horizontal]):

- Tile 1: [2, 1], [0, 0], [vertical]
- Tile 2: [1, 0], [1, 0], [horizontal]
- etc.

4.2 Output file format

The output file should be defined as a *.txt file in the following manner:

- first line should contain a string representing a single integer value - the resulting score of the board,
- all the following lines should contain the list of tiles - computed solution where the first line represents the first tile to remove.
- the tiles should be encoded in the same way as for the input file.
- if there is no solution list on the output of the algorithm, the output file should contain only the information about score.