

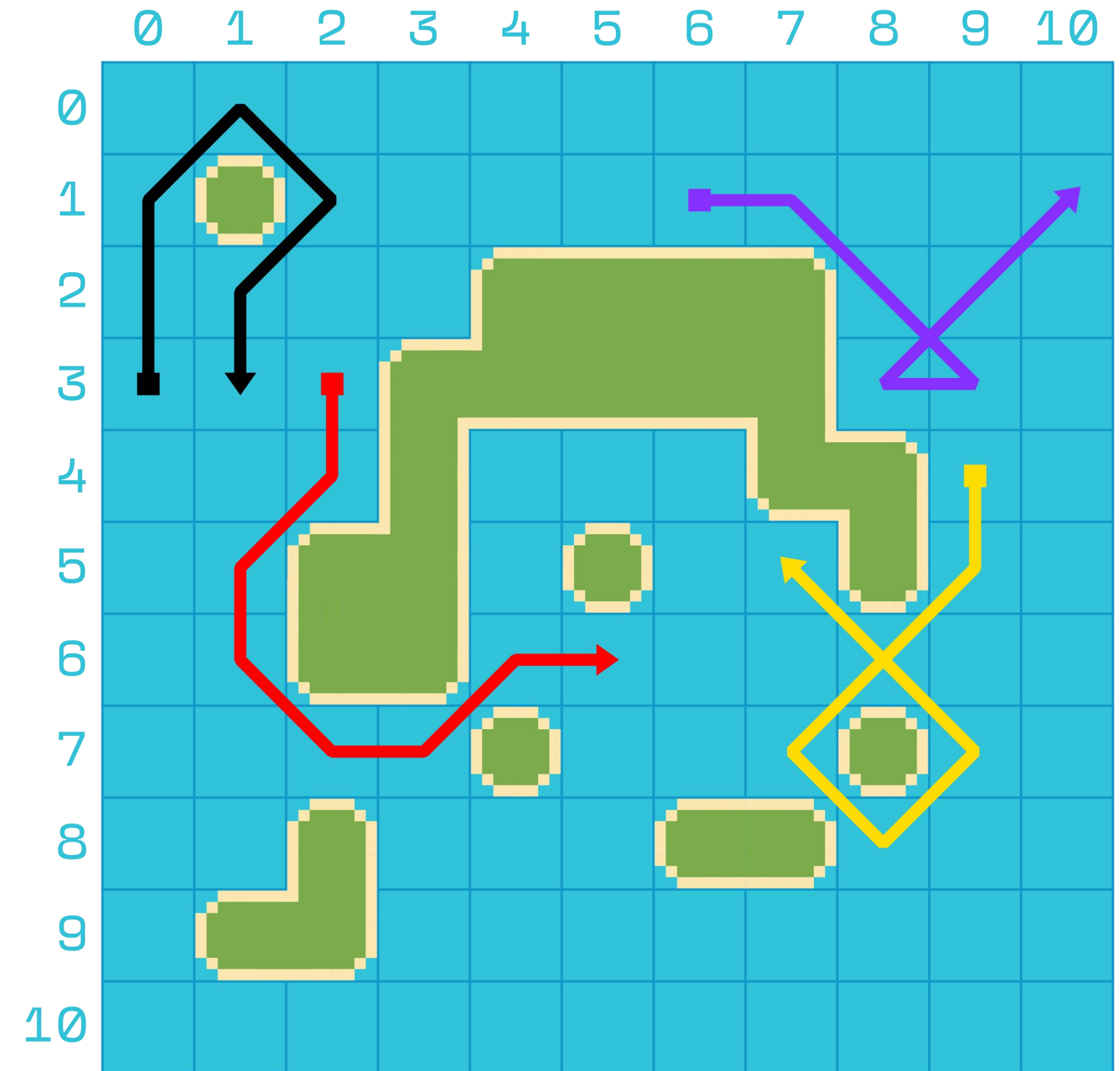
LEVEL 3





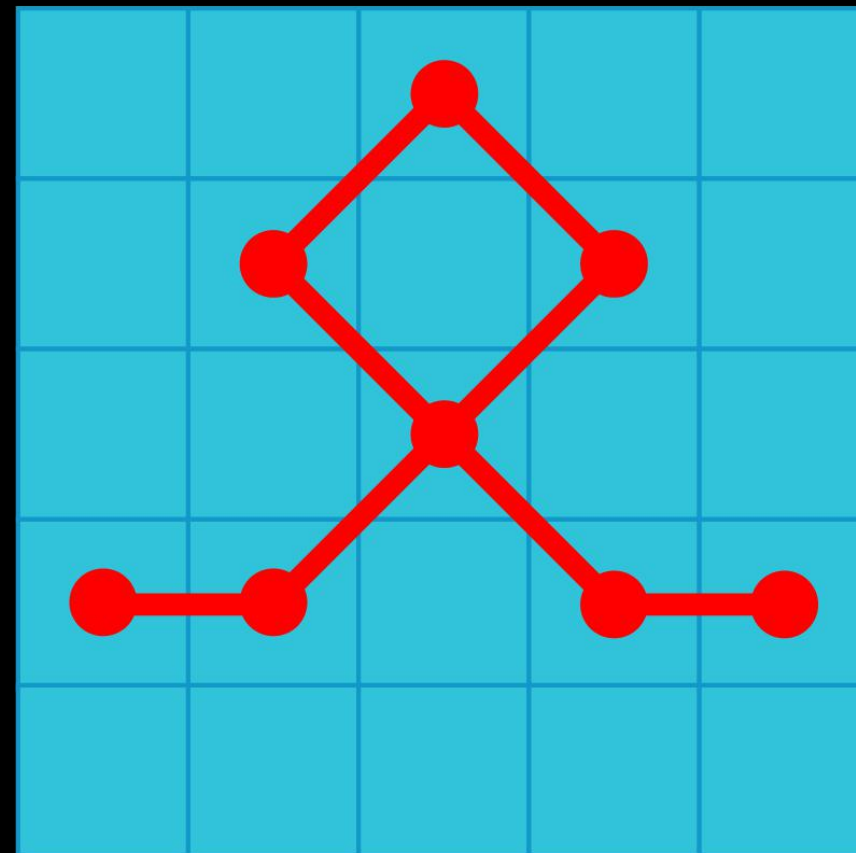
I got a few routes planned. You bilge rat will check 'em.

- Given a list of sea routes, for each sea route, find out whether it intersects with itself.
- The map is irrelevant in this level.
- The ship can also move diagonally.
- The different routes do not interact with each other.

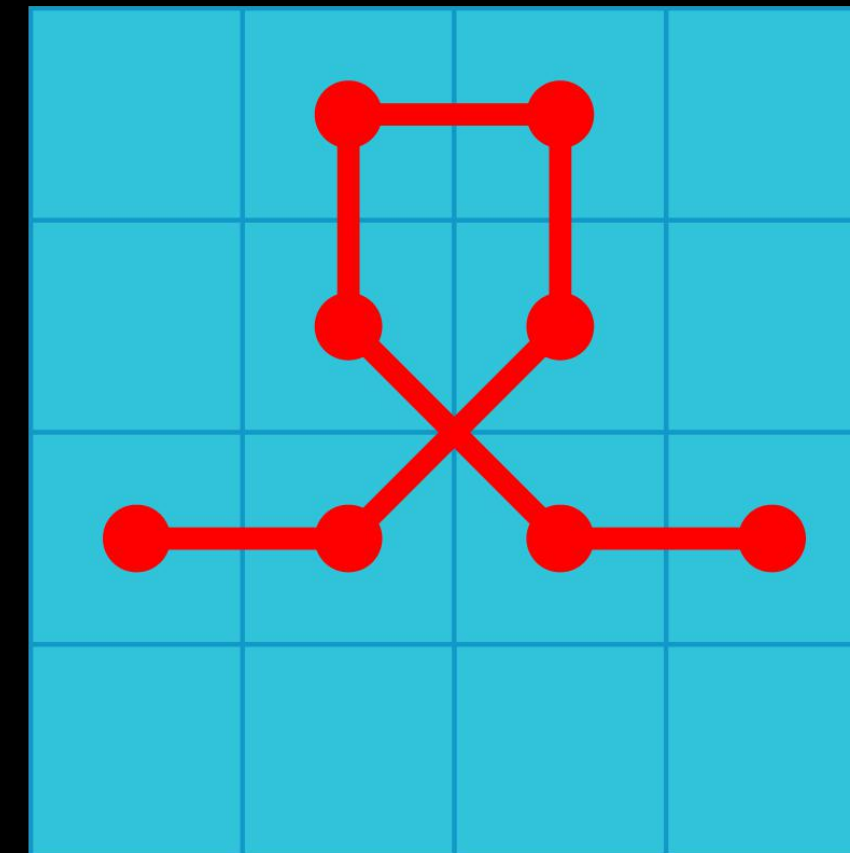


An intersection is when

The same tile is
visited twice



Two diagonal steps
cross each other




Input

| Name | Description | Example |
|----------------------------|---|--|
| Size of Map | An integer representing the width and height of the map | <div>11</div> <div>WWWWWWWWWW</div> <div>WLWWWLWWW</div> <div>WWWWLLLLWWW</div> <div>WWWWLLLLWWW</div> <div>WWLWWLWW</div> <div>WLLWLWWLWW</div> <div>WLLWWWWWW</div> <div>WWLWWLWWLWW</div> <div>WWLWWLWWLWW</div> <div>WLLWWWWWW</div> <div>WWWWWWWWWW</div> <div>4</div> <div><div>2,3</div><div>2,4</div><div>1,5</div><div>1,6</div><div>2,7</div><div>3,7</div><div>4,6</div><div>5,6</div></div> <div><div>9,4</div><div>9,5</div><div>8,6</div><div>7,7</div><div>8,8</div><div>9,7</div><div>8,6</div><div>7,5</div></div> <div><div>6,1</div><div>7,1</div><div>8,2</div><div>9,3</div><div>8,3</div><div>9,2</div><div>10,1</div></div> <div><div>0,3</div><div>0,2</div><div>0,1</div><div>1,0</div><div>2,1</div><div>1,2</div><div>1,3</div></div> |
| Map | A paragraph of characters | |
| N | An integer representing the number of paths | |
| Path (repeated N times) | A list of coordinates separated by a space | |

Output

| Name | Description | Example |
|------------------------------|-------------|---|
| Result (repeated N times) | | <div>VALID</div> <div>INVALID</div> <div>INVALID</div> <div>VALID</div> |





May the winds of fortune
blow in your favor.

CLOUDEFIGHT
CODING
CONTEST

#WeLoveSoftware
u too? cloudflight.io/career

