1. INPUT

Input

2 8 3 5 7 9 6

1 7

2 7

3 8

2 9

1 9

1 8

Output

Duck Dodgers cannot reach the Illudium Phosdex, but Marvin the Martian can Marvin the Martian's path:

$$3,5 - 4,5 - 5,5 - 6,6 - 6,7 - 7,8 - 7,9$$

Maps

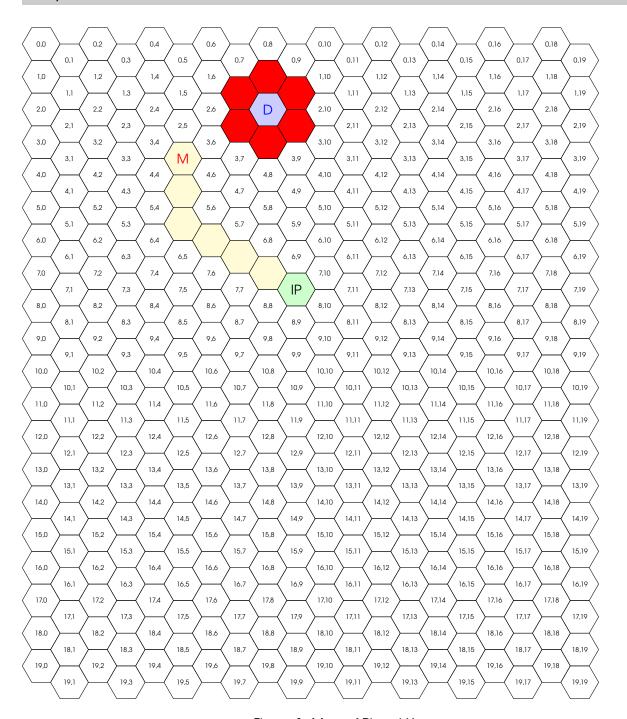


Figure 1: Map of Planet X