

1. INPUT

Input

```
3 5 2 8 7 9 6
1 7
2 7
3 8
2 9
1 9
1 8
```

Output

Marvin the Martian cannot reach the Illudium Phosdex, but Duck Dodgers can
Duck Dodgers' path:
3,5 - 4,5 - 5,5 - 6,6 - 6,7 - 7,8 - 7,9

Maps

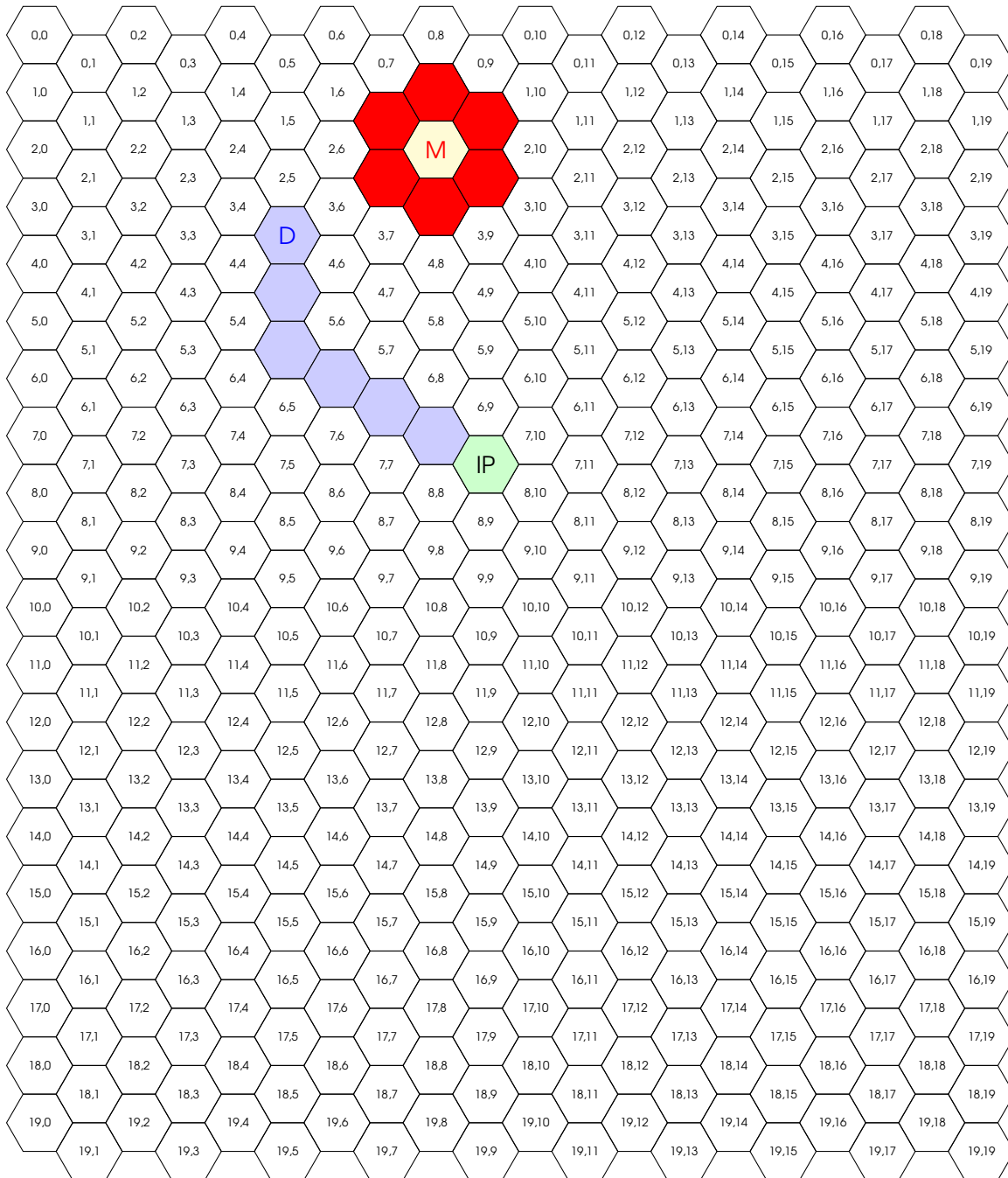


Figure 1: Map of Planet X