H: Hamiltooonian Hike

Problem Author: Jorke de Vlas



Problem: Find a hiking path that visits all cabins, walking at most three trails every day.

Statistics: 28 submissions, 9 accepted, 8 unknown

BAPC 2021

Problem Author: Jorke de Vlas



Problem: Find a hiking path that visits all cabins, walking at most three trails every day.

Solution: A modified DFS, starting from an arbitrary cabin *s*.

Statistics: 28 submissions, 9 accepted, 8 unknown





- Problem: Find a hiking path that visits all cabins, walking at most three trails every day.
- **Solution:** A modified DFS, starting from an arbitrary cabin *s*.
- Variant 1:
 - While *descending*, only stop at cabins that have *odd* distance to *s*.
 - While *ascending*, only stop at cabins that have *even* distance to *s*.

Statistics: 28 submissions, 9 accepted, 8 unknown





- Problem: Find a hiking path that visits all cabins, walking at most three trails every day.
- **Solution:** A modified DFS, starting from an arbitrary cabin *s*.
- Variant 1:
 - While *descending*, only stop at cabins that have *odd* distance to *s*.
 - While *ascending*, only stop at cabins that have *even* distance to *s*.
- Variant 2:

While *descending*, only stop at a cabin *c* if either:

- you have walked three trails since the last cabin you stopped at, or
- you have already walked past all neighbouring cabins of *c* and need to *ascend* again.

Statistics: 28 submissions, 9 accepted, 8 unknown