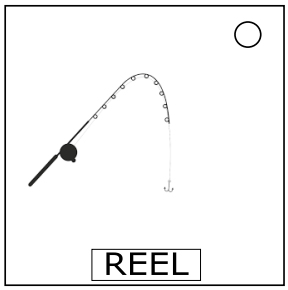
On the Subject of Superpofishin'



Play some Quantum Go Fish with some tricky fish.

Note: If only one fish appears after pressing Reel, you are looking at the wrong manual!

To begin, press Reel. Three fish will appear representing one turn in a game of Quantum Go Fish. Use Keep and Throw to navigate between game turns. The rules to Quantum Go Fish can be found on the next page.

After the last turn, all cards will only have one possibility. Moving past this turn shows twelve fish buttons and an input display. Press Reel here to return to viewing the game turns.

Input every players' hand to solve the module. The hands can be entered in any order. Input a hand by inputting the player and all of that player's cards. These inputs within a hand can be entered in any order.

Inputting an invalid will result in a strike. That fish will not be input, but nothing will reset.

House Rules

The fish are tricky, and have decided on some house rules before the game started, but aren't telling them to you. They have chosen which cards to use, and which fish represent yes and no. They have also chosen some order to show you the asked player, the asked card, and the aforementioned yes-no response.

Importantly, the players are fish, but so is all of the other information.

The fish don't like to leave someone with no cards, so they will never do that.

Quantum Go Fish

Each player starts with four indeterminate cards. There are four cards of each suit, and exactly as many suits as there are players in the game.

Each player takes a turn in order, unless that player has no cards, in which case they are skipped.

On a player's turn, they ask another player "[Player], do you have a [suit] card?", where the asking player already have a card of that suit. The asked player must truthfully respond with "Yes" or "No". If they say "Yes", they give one card of that suit to the player whose turn it is.

A question or response is only valid if the cards could have always been in some arrangement that makes it valid.

Another way to think about this is that every card starts in a superposition of every possibility. Every turn partially collapses this superposition, leaving only some possibilities valid.

Example Game

This example uses players 1, 2, and 3, and card suits A, B, and C.

#: P C R	Game State	Notes
1: 2 A Y	1: A A ? ? ? 2: ? ? ? 3: ? ? ? ?	Player 2 gives one A card to player 1.
2: 1 B N	1: A A (A C) (A C) (A C) 2: B ? ? 3: ? ? ? ?	Since player 1 said no, none of their cards can be B cards.
3: 1 C Y	1: A A (A C) (A C) 2: B ? ? 3: C C ? ? ?	Player 1 must say yes here, since they cannot have five A cards.
1: 2 C Y	1: A A A C C 2: B ? 3: C C ? ? ?	All four C cards have been accounted for, so no more can exist. This means that player 1's last card must be an A.
2: 3 A N	1: A A A C C 2: B A 3: C C B B B	By asking the question, player 2 determines the positions of every remaining card, and so player 3 must say no.