## Хуан Сыюань Р33101

- 1. No. If all poor guys are honest, but we can know poor -> honest. But we can't get the result from honest to poor. Cannot be deduced backwards
- 2. mother(RM,D), RM = M.
- 3. 2. Because there will have 2 andrei. There are 2 facts: parent(sergei, andrei). parent(natalia, andrei). And when we run sibiling(A,B) we will get 2 parents. And Andrei is not nikita. So we get Andrei twice).
- 4. Mb  $2^6 1 = 63$ . If we move as usual, from the  $1^{st}$  to the middle. And we have a 6 disks which means we have 63 operations. Then we can say we need to restore the state for the  $49^{th}$  operation.
- 5. Will show list items one at a time, all on a new line.
- 6. BFS and IDDFS. On the one hand, we can quickly find many branching options, and on the other, we can quickly find a connection between two vertices thanks to depth-first search. And we need to set a limit to DFS. It really depends to the situation when we choose the method.
- 7. I think it depends on the data. We know about the time is  $b^e$ . So if  $(b/2)^e > b^e/2$ , then we halve the depth. Instead, we halved the coefficient.
- 8. Try to taste. (If sweet or sour, then mb it is a fruit), where it grows (If it grows on a tree, then most likely it is a fruit, otherwise a vegetable) Or mb look at the price in the store. (Usually fruits are more expensive)
- 9. They are the relationship between an object and a collection, which means that the object belongs to this collection, which is called a classification relationship (ISA). If it is the relationship between superset and subset, then it is called AKO.
- 10. On behalf of the incident. If we use verb-centric graphs, we don't need graph nesting