Survey 4

* Required

1. **Please give your name** *

_____

2. **Please give your CUHK student ID** *

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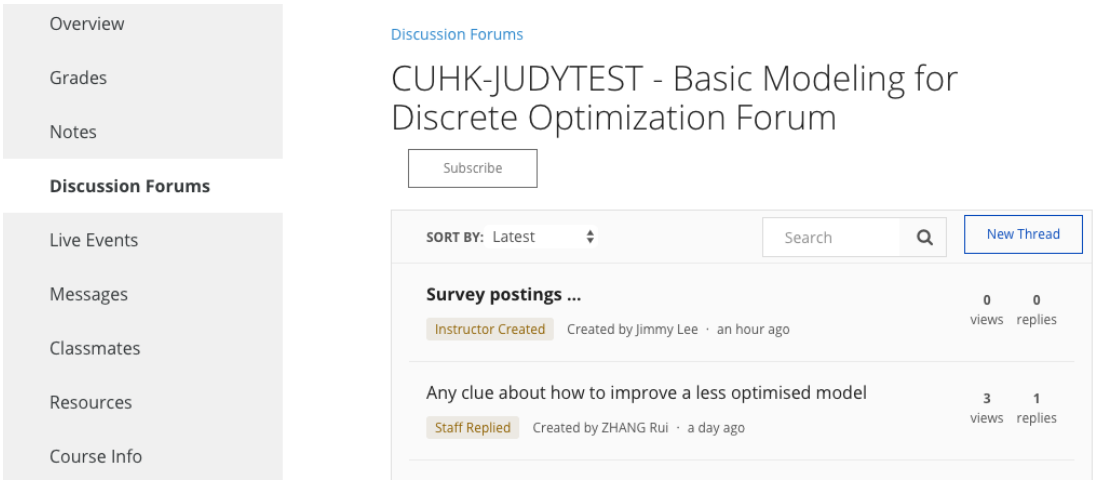
3. **Have you clicked the "subscribe" button in the forum of the coursera?**



Mark only one oval.

- ◯ Yes
- ◯ No
- ◯ What forum?

4. **You need to subscribe the forums of three courses, which ones have you subscribed?**

Check all that apply.

- ☐ I have subscribed the forum of Course 1!
- ☐ I have subscribed the forum of Course 2!
- ☐ I have subscribed the forum of Course 3!
- ☐ No, I have not subscribed any forums!

5. **The notification from the forum will be sent to your CUHK link mail. How many posts have you viewed?**

Check all that apply.

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ More than 3

6. **How much of Assignment 3 have you completed?** *
   Mark only one oval.

   - What? There is an assignment!?
   - Seen it.
   - Thought about it.
   - Tried it.
   - Finished it!!

7. **How many Module 4 lectures have you watched?** *
   Mark only one oval.

   - None
   - 1
   - 2-3
   - All

8. **If I have 5 kinds of shifts and I need between 2 and 4 persons on each shift, and no other constraints on shift numbers, what form of global cardinality constraint should I use?** *
   Mark only one oval.

   - global_cardinality_low_up_closed
   - global_cardinality_low_up
   - global_cardinality
   - global_cardinality_closed
   - Shouldn't use global cardinality family of constraints

9. **If I have 5 kinds of shifts and I need exactly 4 persons on each shift except the last, what form of global cardinality constraint should I use?** *
   Mark only one oval.

   - global_cardinality_low_up_closed
   - global_cardinality_low_up
   - global_cardinality
   - global_cardinality_closed
   - Shouldn't use global cardinality family of constraints

10. **What is a viewpoint in the context of modeling?** *
    Mark only one oval.

    - A person's opinion or point of view
    - A place giving a good view.
    - A way of looking at the decisions of the problem from a specific angle.
    - ALL of the above.
    - NONE of the above.

11. **What are channeling constraints used for?** *

Mark only one oval.

- ◯ Dig a tunnel connecting two models.
- ◯ Allow ship to travel in a channel.
- ◯ Combine two models of the same problem.
- ◯ Restrict information flow in a channel.
- ◯ NONE of the above.

12. **Which of the following are advantages of combining models? You can tick as many as you want.** *

Check all that apply.

- ☐ Get a bigger model.
- ☐ Some constraints are easier to express in certain viewpoint, but more difficult in other viewpoints.
- ☐ Solve problems more efficiently.
- ☐ Get more constraints.
- ☐ Some constraints are more natural to express in certain viewpoint, but impossible in other viewpoints.

13. **Does it make sense to combine a model and a viewpoint (a model without constraints) of the same problem using channeling constraints?** *

Mark only one oval.

- ◯ Yes
- ◯ No
- ◯ Maybe

14. **What is the minimum number of models possible for a permutation problem?** *

Mark only one oval.

- ◯ 0
- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4

15. **Which of the following types of channeling is possible? You can tick as many as possible.** *

Check all that apply.

- ☐ Between two integer viewpoints.
- ☐ Between an integer viewpoint and a set viewpoint.
- ☐ Between a Boolean viewpoint and an integer viewpoint.
- ☐ Between a set viewpoint and a Boolean viewpoint.
- ☐ Between two set viewpoints.
- ☐ Between two Boolean viewpoints.
- ☐ Between two representations of the same viewpoints.

16. **Which of the following types of channeling do you know? You can tick as many as possible.**
Check all that apply.

- [ ] suppose n = m, channeling between two arrays: array[1..n] of var 1..m: x1 and array[1..m] of var 1..n: x2;
- [ ] suppose n > m, channeling between two arrays: array[1..n] of var 0..m: a and array[1..m] of var 1..n: b;
- [ ] suppose n > m, channeling between two arrays: array[1..n] of var 0..m: x1 and array[1..m] of var 0..n: x2;
- [ ] suppose n > m, channeling between two arrays: array[1..m] of var set of 1..n: x1;
- [ ] array[1..n] of var 1..m: x2;

17. **Have you ever encountered errors in MiniZinc related to something called "option types"?** *
Mark only one oval.

- ◯ Yes
- ◯ No
- ◯ Maybe

18. **Have you read and understood Chapter 5 "Option Types" in the MiniZinc tutorial?** *
Mark only one oval.

- ◯ Yes
- ◯ No
- ◯ Maybe

19. **Have you looked at and understood the materials of Reference 6 on "Option Types" on Coursera?** *
Mark only one oval.

- ◯ Yes
- ◯ No
- ◯ Maybe

20. **Do you think you understand option types?** *
Mark only one oval.

- ◯ Yes
- ◯ No
- ◯ Maybe

21. **What is an option type?** *
Mark only one oval.

- ◯ A type that is optional
- ◯ A type that has options
- ◯ A regular type that contains an extra value that denotes "absent" or "no value"
- ◯ A set type of possible values
- ◯ NONE OF THE ABOVE

22. **Which of the following is an option type? You can tick as many as you want.** *
Check all that apply.

- [ ] opt
- [ ] opt int
- [ ] opt bool
- [ ] opt float
- [ ] opt 1..10

23. **Where can you use/find the use of option types? You can tick as many as you want.** *
Check all that apply.

- [ ] forall expressions
- [ ] sum expressions
- [ ] there exists expressions
- [ ] list/set comprehensions
- [ ] sum/max/min expressions

24. **Have you attempted Workshop 4 yet?** *
Mark only one oval.

- ◯ No
- ◯ Thought about it
- ◯ Completed it

25. **How much of Assignment 4 have you completed?** *
Mark only one oval.

- ◯ What? There is another ASSIGNMENT!?
- ◯ Seen it.
- ◯ Thought about it.
- ◯ Tried it.
- ◯ Finished it!!