

Assignment 5

Universal Studio Singapore announced a promotion event: each day they will give a free ticket to the first person in line whose birthday is the same as someone who has already bought a ticket. You have the option of getting in line at any time. Assuming that you don't know anyone else's birthday, that birthdays are distributed randomly throughout the year, etc.

- (1) On Sunday, you wanted to try your luck. When you arrived, there are already 30 people in the queue. What is your chance of winning the free ticket if you join the queue?
- (2) If you have a chance to trade your position with someone in the queue, what position would you like to trade with?