

## 1. Guess / miscellaneous answers

1. Code for participant: arzg04dp Strategy answer: Go big or go home
2. Code for participant: 64fm81ni Strategy answer: 50/50
3. Code for participant: v8ndw0x0 Strategy answer: Try to pick the opposite of my partner
4. Code for participant: vc1ljavg Strategy answer: none
5. Code for participant: swnjdwbb Strategy answer: ?
6. Code for participant: 8yh3xx1b Strategy answer: none
7. Code for participant: sf4kl2zo Strategy answer: Don't know

## 2. Non-random strategies, not fitting in other categories

1. Code for participant: eu1ft65 Strategy answer: Common sense, Minimax
2. Code for participant: uvof5pmo Strategy answer: I always went to the get coffee, unless it was 9:10.
3. Code for participant: 4yr77tx5 Strategy answer: logic
4. Code for participant: 0l0vhs3w Strategy answer: I always went to the Canteen and was very curtent that my boddy would as well.... But I think he/she got really bored with the loading times, and forcefully made us loose as quick as possible after 10 or so good hits.
5. Code for participant: 9uuut467 Strategy answer: Tried to find a rule for myself of when what hours I go to the canteen
6. Code for participant: kzz2ozls Strategy answer: Adhere to the rules. Though the optimal strategy is to always go to the canteen and always be certain, if you know that the college knows that is the optimal strategy.
7. Code for participant: degv17zm Strategy answer: Trying to minimise lose
8. Code for participant: f6nirzuw Strategy answer: If it was completly certain I guessed that otherwise somewhat certain
9. Code for participant: 6yjpscl6 Strategy answer: I tried genuinely choosing the thing I could do, and in case of the edge cases (8.40, 8.50, 9.00, 9.10) I'd use rather lower levels of certainty to minimize the evetual loses. [assuming 8:40 to be edge case indicates first order reasoning]

### 3. Loosely time dependent, strategy based on time

1. Code for participant: it43ekje Strategy answer: Knowing that my coworker could at the latest arrive 10 minutes after me, I always chose the canteen when arriving before 8:30. For the later arrival times, I was less certain and adapted my answers to what my coworker seemed to be answering at given times
2. Code for participant: 7ms9gjyn Strategy answer: Thinking about what time my partner would arrive
3. Code for participant: fzi7n2cn Strategy answer: If I arrived early I would be sure that he would not be in the office so I picked canteen with high certainty. If I arrived late I was very cautious and picked office. However, the other person seemed to pick canteen, so I started taking a risk and picked canteen with low certainty instead.
4. Code for participant: qligwzt1 Strategy answer: Tried to go to the canteen if I arrived before 8:50 but with reduced certainty depending on how close. Tried to read my "teammate" a bit.
5. Code for participant: hil578bg Strategy answer: Whenever 8:50 was hit I always went to the canteen, but answered very uncertain. This guaranteed that 8:40 was always a very certain minimizing losses from both players. , but making 8:50 and 9:00 guaranteed small losses [Assuming symmetry, this is the best cutoff to have]
6. Code for participant: q0ragkjk Strategy answer: Certain to office early, more uncertain later
7. Code for participant: d5y5e89t Strategy answer: Go to where I should go - be uncertain at 8:50 and 9:00
8. Code for participant: mj8r5vux Strategy answer: If time was 8:40 or under, always choose canteen and very certain. If time was 8:50 put canteen and somewhat certain. If time was 9:00 choose office and somewhat certain. If time was over 9:00 choose office and put very certain. I may not have been consistent with this, but this is what I would do from now on. In the start of the game I misunderstood and thought I could go to the canteen at 9:00.
9. Code for participant: a6280itn Strategy answer: I evaluate my answer by considering the "latest" case
10. Code for participant: pqam12mx Strategy answer: Following the validity of the possible time frames. This made me think of possible belief states, thus, trying to guess what should I choose so that I match my opponents choices.

11. Code for participant: 616gaqw2 Strategy answer: I knew, that if I arrived at 08.40 at the latest, then I could be very certain, that my coworker had made the same choice. If I arrived at 08.50 or later, I could would be uncertain, if my coworker made the same choice as me. [Likely includes 0-order reasoning to infer uncertainty at 8:50, but none involved at 8:40]
12. Code for participant: xirgy2as Strategy answer: When 8.30 or earlier I went to the canteen with certainty. When 9.10 I went to the office with certainty. When 8.40 I went to either the canteen with almost certainty or the office with somewhat certainty. At 8.50 and 9.00 I went to the office with almost certainly.
13. Code for participant: 1rwcug6 Strategy answer: go to the canteen whenever there is a chance. If not sure, reduce uncertainty

#### 4. Canteen at 8:50, office at 9:00 and later

1. Code for participant: 3nyzsmpe Strategy answer: Always go canteen, unless arrival is 9 or later. Less certain about coworker if arrival at 8:50 or 9:00.
2. Code for participant: 62drdlwd Strategy answer: For 8:50 an bellow I always choose to go to the canteen, for 9:00 and above I choose to go to the office. It seem like the other player did that to. If I got 8:40 and below I would be very certain that the other player goes to the canteen likewise if I arrived at 9:10 or above we would booth go to the office. If I got 8:50 I would choose to go to the canteen, but there would be a 50% chance that the other player did that to, so I the best payoff would come from being very uncertain likewise for 9:00.
3. Code for participant: gt6pemo0 Strategy answer: If I had time to go to the canteen I would always go. However, if I arrived at 8:50 I would be very unsure that my colleague would also go to the canteen. If I arrived before 8:50 I would also go to the canteen, but here I would be very sure that my colleague would do the same.
4. Code for participant: ymmxmzlw Strategy answer: Pick the canteen before 9 and the office after 9 and adjust the certainty if the clock is 8:50 or 9:00
5. Code for participant: 86wga0kd Strategy answer: Consistent, always canteen 8:50 and earlier.
6. Code for participant: 0iusd3w7 Strategy answer: Always very certain of office unless arrive 9.00 or later. 8.50 was a gamble

## 5. Canteen at 8:40, office at 8:50 or later

1. Code for participant: gsvqidzt Strategy answer: Choosing the canteen if there was a possibility of not being nine
2. Code for participant: uwks3ti Strategy answer: I decided to go to the office if I came at 8.50 or later, otherwise to the canteen. I chose to (somewhat) uncertain when I arrived at either 8.40 or 8.50, otherwise I was very certain.
3. Code for participant: wldoycxj Strategy answer: When arriving 8.50 or later, always go to office. If 8.40 try canteen with slightly uncertainty. If earlier, always go to canteen
4. Code for participant: reoi4tcq Strategy answer: If i arrived at 0900, go to office. At 0850, assume other person went to office and go to office. At 0840 assume other person assumed I went to office and go to office At 0830 50/50 bet At 0800 to 0820 assume other is also betting on canteen.
5. Code for participant: bvrck71g Strategy answer: Tried to figure out what choices would be made around the 8.50 mark. Because the other person could have arrived around the 8.40 or 9.00 mark. If we both figured out to go to the office at 8.40+ times, we could even out our answers. But we never found a flow.
6. Code for participant: getiy58s Strategy answer: For everthing except 8.40 and 8.50 I played very certain. For 8.40 I chose canteen but with slight uncertainty. 8.50 was office with very uncertain
7. Code for participant: ul32r8je Strategy answer: I think 8.50 or later go office otherwise go canteen is a good strategy
8. Code for participant: oxpd0w50 Strategy answer: I was always 'very certain'. Depending on the time I always chose canteen unless the time was between 8:50-9:10. My partner did the same. Very risi, but went very well untill the last few rounds [The "very risi[sic]" probably refers to the 'very certain' estimate]
9. Code for participant: p5uvm2k4 Strategy answer: Minimize loss mathematically 8.30 and before go to canteen Very certain 8.40 go to canteen very uncertain 8.50 go to office very uncertain 9 and later go to office very certain [Not being certain about canteen at 8:40 indicates ToM]
10. Code for participant: f308g8k0 Strategy answer: Always go the canteen unless it's 8:50 or later. If I arrive at 8:50 then I chose canteen or office randomly because the other person could have arrived at 9:00 or 8:40.
11. Code for participant: fpbnodjr Strategy answer: If I arrived before 8:50 then I would go to the canteen for sure. If i arrived after then I would go to the office but be unsure about it.

12. Code for participant: tgsev17z Strategy answer: From 8:00 to 8:20 I went to the canteen and expected my teammate to do the same with high confidence. From 8:30 to 8:40 I went to the canteen but with less certainty. From 8:50 to 9:00 I went to the office with average certainty, and at 9:10 I went to the office with high confidence. [Good introspection, in the sense that many players did this]

## 6. Canteen at 8:30, office at 8:40 and later

1. Code for participant: 1jxe8x0j Strategy answer: If i arrive before 08:40, I go to the canteen and I'm very certain that my colleague has made the same choice. If I arrive after 09:00 I go to the office, and I'm somehow certain that my colleague has done the same.
2. Code for participant: nasxyu56 Strategy answer: If assigned 8:50 to 9:10, I would choose office very certain. If 8:40, office somewhat certain. If 8:30, canteen very uncertain. If 8:20 or below, canteen very certain. [Not certain at canteen at 8:30 indicating 2-order reasoning]
3. Code for participant: eyjr8956 Strategy answer: If I arrived at or before 8:30, choose Canteen and Very Certain. If I arrived at 8:40, choose Canteen and a certainty in the middle. If I arrived at 8:50, choose either Canteen or Office and a low certainty. If I arrived later than 8:50 choose Office with high certainty.
4. Code for participant: qx6yytx4 Strategy answer: 8:30 or less: cantene, very certain. 8:40: then my partner may have 8:50 and beleive that I got 9:00, however unlikely. Therefore i go to the cantene 8:50 or more: I go to office but is uncertain as my partner could arrive at 8:40 and beleive I were in the cantene at 8:30.
5. Code for participant: filxkq9g Strategy answer: Time <= 830 -> Cantine  
Time >= 840 -> Office Time <= 830 || Time >= 850 -> Certain Time  
== 840 -> Somewhat Uncertain

## 7. Explicit first-order social reasoning

1. Code for participant: 4h5bhqj6 Strategy answer: Trying to adapt to what my teammate was thinking, but I guess he did the same as we had some misunderstandings.
2. Code for participant: gm01kvol Strategy answer: Trying to minimize lose. Trying to calculate the other players move, when close to office hours.
3. Code for participant: x3xi6vwr Strategy answer: I tried to understand the other players way of thinking and base my own decisions on that.
4. Code for participant: rakdg3dg Strategy answer: I tried to base my guess around my partners possibilities. If i were to arrive at 8:50, theres a good

chance he arrives at 9 and goes to the office. If i were to arrive at 8:40 he might be in the aforementioned situation [Some 0-order reasoning goes into the game, and at 8:40 this reasoning is attributed to other player, e.g. first order reasoning]

5. Code for participant: mcy6m2yg Strategy answer: Thinking about what time the other person thought I could arrive
6. Code for participant: k7w2uxa9 Strategy answer: When arriving at 8:40, you Should not be certain. The otter person might arrive at 8:50 and therefore he might Think that you arrive at 9 and go to the Office. When you have more than a 20 buffer - be certain
7. Code for participant: fd0h0ps5 Strategy answer: Evaluated what time my colleague would arrive and then chose what I thought they would do in the given situation.
8. Code for participant: lzejws5v Strategy answer: Trying to predict what the other would do
9. Code for participant: m9ilrfce Strategy answer: So depending on my time I was subtract or add 10 minutes to find out my colleague's arrival time. Then depending on the time limit I was assume the was case scenario for me and based on that I was taking the decision. For example if my arrival time was 8:50 , my colleague's arrival time would be 8:40 or 9:00. If it was 8:40 then the choice would be to go to the Canteen with 100% possibility. It was 9:00 there was a high possibility for him to go to the office. In that case I was choosing that option with the "very uncertain" option.

## 8. Explicit second-order social reasoning

1. Code for participant: 4vnbdkgv Strategy answer: You know that your opponent believes your time is within 20 minutes of what it is so you can guess at what they will guess that you will do
2. Code for participant: fkb63rpz Strategy answer: It was easy for 8:00, 8:10 and 8:20. There I would go to the canteen based on the fact, that my friend would arrive at latest at 8:30, and then they would in worst case scenario think that I arrived at 8:40. Thus we would both go for coffee. In the case of 8:30, I would also go to the canteen, but I would not be very certain cause my friend might be there at 8:40 and think that I would be there at 8:50. They might think that IF I am there at 8:50, I would think that my friend is there at 9:00, and thus I might go to the office. Thus for 8:30 and above it is not certain. It would depend on the history of our decisions... [This is 2nd or 3rd order reasoning. Notice that it also includes some forward inductive reasoning (earlier choices being important) and that 8:20 and earlier are simply deemed easy]

## 9. Behavior based, match the other player, reactive strategies.

1. Code for participant: 8kszs2jr Strategy answer: Always go to the canteen if 8:20 or earlier, always go to office if 8:50 or later, for 8:30 and 8:40 arrivals try to guess based patterns of previous arrival times
2. Code for participant: pkriwkms Strategy answer: Seeing what the opponent did in previous games, and adjusting my game to that
3. Code for participant: q1gi5k8m Strategy answer: I followed what my partner did, to guess his moves on each case. I considered both the cases 10 min before and after, and evaluated his guesses, and did some probability calculations

## 10. Learning or changing strategy through game

1. Code for participant: luykbvrv Strategy answer: At first it was very certain that I went to the canteen if I arrived 8.40 or earlier. But this was expensive if my buddy went to the office at 8.50. So I tried to be more conservative when arriving 8.40 or later. The best strategy would be for both to go to the office everytime. [Figuring out office only strat!]
2. Code for participant: ovpi7o74 Strategy answer: In the beginning: assuming random arrival time, with higher probability that arrival was before 9:00, so simply choosing to going to the canteen with somewhat certainty. After first week: assume bus is late on wednesdays, so go to office, go to canteen on other days. Later: go to canteen if your own time + 10 min < 9:00.
3. Code for participant: nqj339em Strategy answer: Found the limit for there the co worker would go to the office and then based my choices on that. Basically at 8.30 you don't know if the co worker will arrive at 8.20 and go to the canteen or 8.40 and thus go to the office. The same goes for arriving at 8.40. The rest of the answers were trivial after discovering this. [At 8:30, you consider that the other player arrived at 8:40, and went to the office because he considered you arriving at 8:50, entailing office, that is 2-order reasoning. But the rest of the answers (e.g. 8:20 are deemed trivial, since 3-order reasoning is not considered)]
4. Code for participant: w0v03hi4 Strategy answer: A bad one, considering the result :D At the beginning it was a bit hard to guess the actions my colleague will make. After several rounds, I noticed that in most of the cases my colleague goes to the canteen, therefore I chose that I always go to the canteen if I arrive to work at before 9 o'clock - and in most cases I was very certain we would do the same.
5. Code for participant: eex9f34c Strategy answer: If there was a change my partner was 10 from 9 I went a bit uncertain, after a while we discovered

that we both went office at 8:50, so 9 became certain but now 8:40 was uncertain. [Developing first-order considerations, or learned behavior]

6. Code for participant: wzhp90 Strategy answer: I said very uncertain at 8.50 and 9.00, and picked the corresponding "right" choice for me. I didn't start out doing this, I started by picking random at 8.50 and 9.00, but change it a few rounds in.
7. Code for participant: ury717cx Strategy answer: At first, go to the canteen if I arrive before 9am. Later, if the colleague goes to office if he arrives at 8:50, I will choose to go to office at 8:50 with some certainty, and go to canteen at 8:40 with some certainty.
8. Code for participant: q0ehudqy Strategy answer: Learning the opponent and regarding the rules at the same time
9. Code for participant: qjr2w7tc Strategy answer: I tried to figure out which at which times my colleague went to the canteen and which times he/she went to the office. Then I choose whichever was most probable, taking the arrival before and after into account. For example, if my colleague mostly went to the canteen at 8.40, but sometimes to the office, I would choose the office at 8.50.

#### **11. Office only**

1. Code for participant: 31ff8gyx Strategy answer: Initially to take office every time, but my partner didn't really got the strategy.
2. Code for participant: mcnnxew Strategy answer: Go to the office!
3. Code for participant: cr99q5qc Strategy answer: The meta of the game changed over the game. Because there will always be a clashing point there will always be a time where someone is uncertain of what to do. We started by having 8:40 as the problem because I chose canteen there but later we chose office at that point. One strategy would be always office.