

IN-CLASS EXERCISE 2 (ICE2)

Student Name:

Student ID:

[1] Suppose you are the row player. Which action will you choose/play in each of the following games (games A, B and C)? Why?

Game A:

	Left	Middle	Right
Up	2,2	3,1	0,2
Straight	1,3	2,2	3,2
Down	2,0	2,3	2,2

UP

Because I think the column player is rational, we will choose Nash equilibrium.

Game B:

	Left	Right
Up	9,10	8,9.9
Down	10,10	-1000,9.9

UP

Because if I choose down I may lose 1000, it's too huge for me.

Game C:

	Stag	Hare
Stag	200,200	0,100
Hare	100,0	100,100

Stag

Because I believe column player will choose the Nash equilibrium.

[2] Unconditional contribution decision and the contribution table

In-class Activity “Conditional Cooperation” Instructions

Assume that you are a member of a **group of 3 people**. Each member has to decide on the **division of 20 points**. You can put these 20 points on a **private account** or you can invest them fully or partially into a **group project**. Each point you do not invest into the group project will automatically be transferred to your private account.

For each point you put on your **private account** you will **get exactly one point**. For example, if you put 20 points on your private account you will get exactly 20 points from the private account. If you put 6 points into the private account, you will receive a payoff of 6 points from the private account. **Nobody except you earns anything from your private account.**

From the points you invest into the **group project**, **each group member regardless of who invests into the group project, will get the same payoff**. Thus, for each group member the payoff from the group project will be determined as follows:

Payoff from the group project = $(0.5) * (\text{sum of contributions to the project})$.

For example, if the sum of all contributions to the group project is 40 points, then you and all other group members will get a payoff of $(0.5) * (40) = 20$ points from the group project. If the three group members contribute 10 points in total to the group project, you and all others in your group will get a payoff of $(0.5) * (10) = 5$ points from the group project.

Your total payoff results from the summation of your payoff from the private account and your payoff from the group project:

$$\begin{aligned} \text{TOTAL PAYOFF} = & \text{Payoff from the } \underline{\text{private account}} \text{ (=20 -} \\ & \text{contribution to the project)} + \text{Payoff from the } \underline{\text{group project}} \\ & \text{(=0.5*sum of contributions to the project)} \end{aligned}$$

Each of you has to make **TWO types of decisions**. We will call them as, respectively, “**unconditional contribution**” and “**contribution table**”.

- With the **unconditional contribution** to the group project you have to decide **how many of the 20 points you want to invest into the group project**. You will enter this amount on the left hand side of the decision sheet:

Remaining time [sec]: 0

Subject id 457747

Unconditional contribution decision

Please type in the box below the number of points (between 0 and 20) that you want to contribute to the group project.

Your unconditional contribution is

Contribution table

Please type in each blank below the number of points (between 0 and 20) that you want to contribute to the group project if the other group members contribute on average the amount to the left of the blanks below.

Click "OK" once you have filled out the whole contribution table and the unconditional contribution.

Average contribution of others	Your contribution	Average contribution of others	Your contribution	Average contribution of others	Your contribution
0	<input style="width: 40px; text-align: center;" type="text" value="0"/>	7	<input style="width: 40px; text-align: center;" type="text" value="0"/>	14	<input style="width: 40px; text-align: center;" type="text" value="0"/>
1	<input style="width: 40px; text-align: center;" type="text" value="0"/>	8	<input style="width: 40px; text-align: center;" type="text" value="0"/>	15	<input style="width: 40px; text-align: center;" type="text" value="0"/>
2	<input style="width: 40px; text-align: center;" type="text" value="0"/>	9	<input style="width: 40px; text-align: center;" type="text" value="0"/>	16	<input style="width: 40px; text-align: center;" type="text" value="0"/>
3	<input style="width: 40px; text-align: center;" type="text" value="0"/>	10	<input style="width: 40px; text-align: center;" type="text" value="0"/>	17	<input style="width: 40px; text-align: center;" type="text" value="0"/>
4	<input style="width: 40px; text-align: center;" type="text" value="0"/>	11	<input style="width: 40px; text-align: center;" type="text" value="0"/>	18	<input style="width: 40px; text-align: center;" type="text" value="0"/>
5	<input style="width: 40px; text-align: center;" type="text" value="0"/>	12	<input style="width: 40px; text-align: center;" type="text" value="0"/>	19	<input style="width: 40px; text-align: center;" type="text" value="0"/>
6	<input style="width: 40px; text-align: center;" type="text" value="0"/>	13	<input style="width: 40px; text-align: center;" type="text" value="0"/>	20	<input style="width: 40px; text-align: center;" type="text" value="0"/>

OK

Help

You can use an electronic calculator at any time by clicking the CALCULATOR icon.
Once you are done, you can click anywhere on the screen and the calculator will disappear.

- Your second task is to fill out a “**contribution table**”. In the contribution table you have to indicate **for each possible average contribution of the other group members** (rounded to the next integer) **how many points you want to contribute to the project**. You can condition your contribution on the average contribution of the other group members. This is shown in **the right hand side** of the above figure. The numbers next to the input boxes are the possible (rounded) average contributions of the other two group members to the project.

You simply have to write into each box how many points you will

contribute to the project conditional on the indicated average contribution.

You have to make an entry into each input box. For example, you will have to indicate how much you contribute if the average contribution of others is 1, 2, or 3 points etc. **In each input box you can write all integer numbers from 0 to 20.**

Unconditional contribution decision

Please type in the box below the number of points (between 0 and 20) that you want to contribute to the group project.

Your unconditional contribution is

Contribution table

Please type in each blank below the number of points (between 0 and 20) that you want to contribute to the group project if the other group members contribute on average the amount to the left of the blanks below.

Click "OK" once you have filled out the whole contribution table and the unconditional contribution.

Average contribution of others	Your contribution	Average contribution of others	Your contribution	Average contribution of others	Your contribution
0	<input type="text"/>	7	<input type="text"/>	14	<input type="text"/>
1	<input type="text"/>	8	<input type="text"/>	15	<input type="text"/>
2	<input type="text"/>	9	<input type="text"/>	16	<input type="text"/>
3	<input type="text"/>	10	<input type="text"/>	17	<input type="text"/>
4	<input type="text"/>	11	<input type="text"/>	18	<input type="text"/>
5	<input type="text"/>	12	<input type="text"/>	19	<input type="text"/>
6	<input type="text"/>	13	<input type="text"/>	20	<input type="text"/>