

Problem Solving Techniques 문제해결

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Exercise C

■ 5 points

- The exercise is not evaluated in detail but evaluated as Pass/Fail.
- (Note that each homework will be about 100 points.)

■ Why 5 points?

- I want all students to solve this exercise to participate in-class discussion for the exercise.

■ Report submission (no code submission)

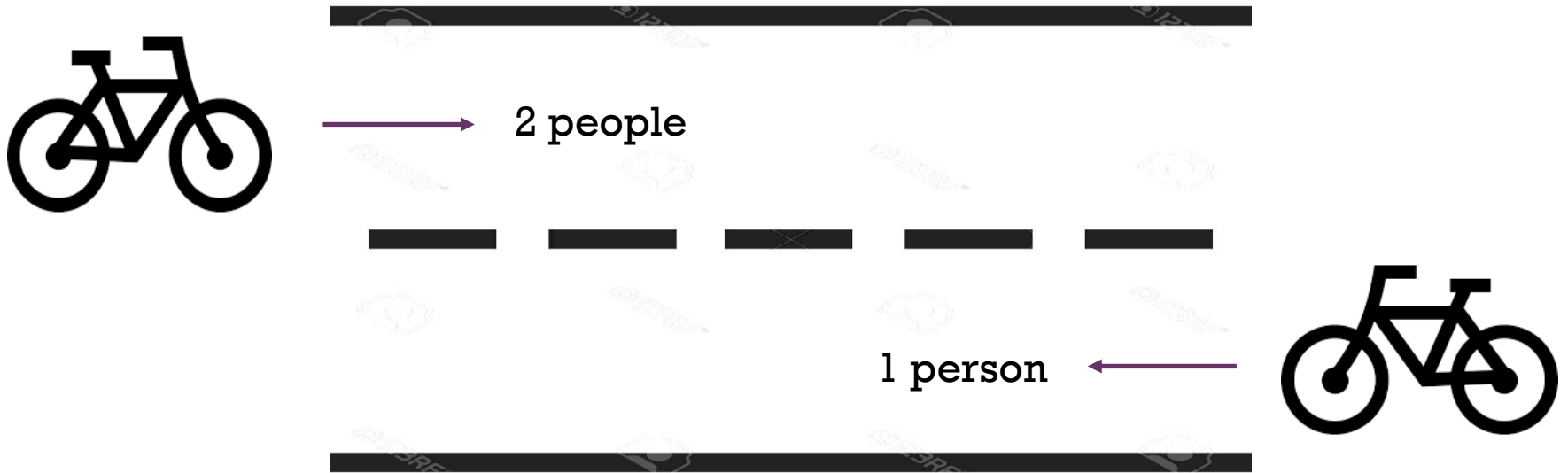
- Due date: 3/29 23:59 (no late submission accepted)
- Submission site: <https://icampus.skku.edu/>
- Submission format: [Template] Report for exercise/homework
 - File name: yourid_EX_C.pdf
 - Example: 2000123456_EX_C.pdf

Exercise C

■ Bicycle

- N people are now at A with a bicycle, and they want to move to B ($1 \leq N \leq 1000$).
 - A person or two people should ride a bicycle to move between A and B. (Up to two people can ride a single bicycle).
 - Each person has a different speed for riding a bicycle.
 - If two people ride a bicycle, the speed of the bicycle depends on the speed of the slower person.
 - The goal is to minimize the time for the N people to move to B.
- Input: the time for each person to move from A to B (integer numbers).
- Output: a series of lines, each containing either one or two numbers, indicating which person/people form the next group to move. Each person is indicated by the time to move between A and B.

Exercise C



1 2 5 10

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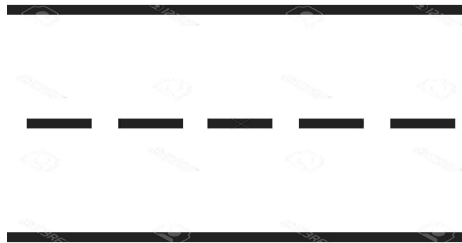
Exercise C

■ Example

■ Input

1 2 5 10

■ Output



	//	[1 2 5 10 /]
1 2	// Two people move from A to B during $\max(1,2)$ time units.	[5 10 / 1 2]
1	// A person moves from B to A during 1 time unit.	[1 5 10 / 2]
5 10	// Two people move from A to B during $\max(5,10)$ time units.	[1 / 2 5 10]
2	// A person moves from B to A during 2 time units.	[1 2 / 5 10]
1 2	// Two people move from A to B during $\max(1,2)$ time units.	[/ 1 2 5 10]

■ In this example, the time for the 5 people to move to B is $2+1+10+2+2=17$