Problem Solving Techniques 문제해결

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Homework 2a

- 20 points for coding evaluation
  - Submission format
    - You file should work on skku.goorm.io with gcc 11.1.0 complier
  - Submission site: https://skku.goorm.io
    - [Homework] 2a (code)
- 5 points for report
  - The report is not evaluated in detail but evaluated as Pass/Fail
  - Submission format: [Template] Report for exercise/homework
    - File name: yourid_HW2a.pdf
      - Example: 2000123456_HW2a.pdf
  - Submission site: https://icampus.skku.edu/
    - Week 5: [Homework] 2a (report)
- Due date: 4/12 23:59 (no late submission accepted)

Rules for homework

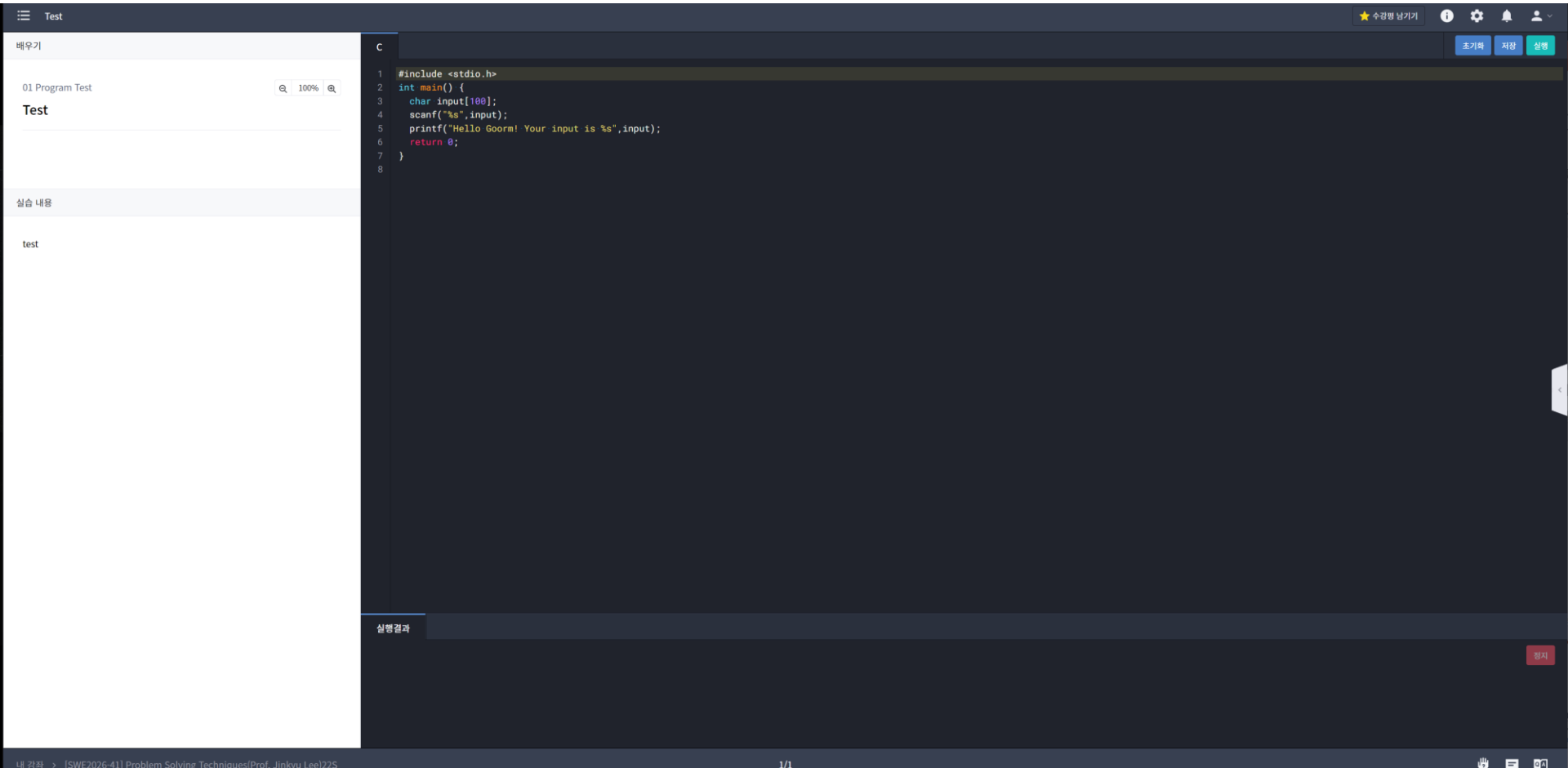
- You should follow instructions.
  - Complier
    - You will get no/less point if your program cannot be complied with the specified complier
  - Input/output format
    - You will get no/less point if TA's automatic evaluation program cannot parse your input or output.
  - Permitted modification scope
    - You will get no/less point if you modify code outside of the permitted modification scope
  - All other rules
    - You will get severe penalty or no/less point if you violate the given rules.

Complier for homework

- Complier
  - skku.goorm.io -> gcc 11.1.0

C language, not C++ language

  - Your program will be correctly evaluated *only if* your program works on skku.goorm.io with gcc 11.1.0 complier

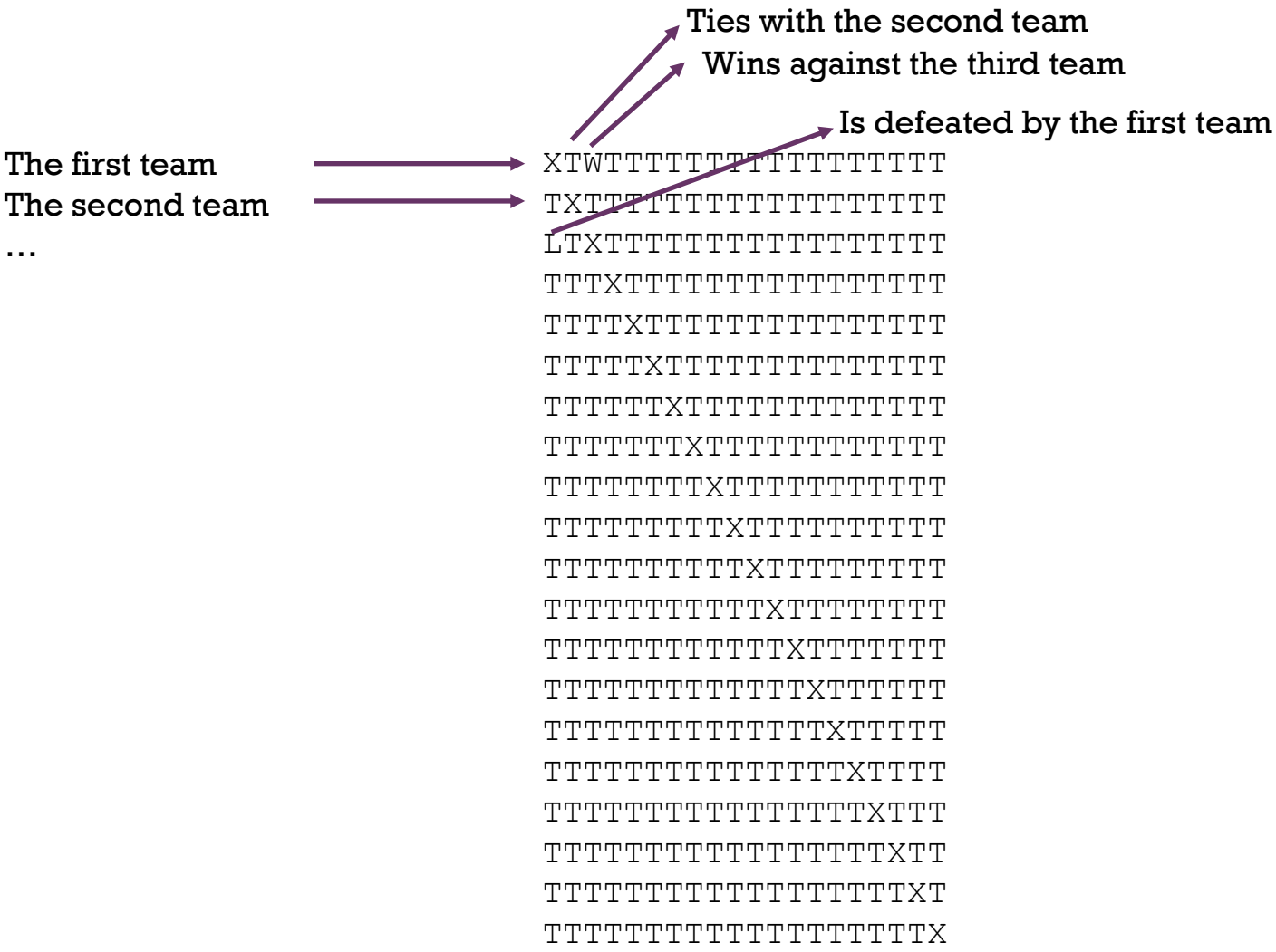


Problem

- Points for soccer teams: preliminary
  - A soccer league has 20 teams, and each team plays 19 games—once with all other teams. Each team gets
    - A points when it wins, represented by “W” (win),
    - B points when it ties, represented by “T” (tie), and
    - 0 points when it is defeated, represented by “L” (lose),
    - where A and B are integers satisfying $0 < B < A < 10$.
  - Then, results are represented by the 20 by 20 matrix shown in the next slide.
  - Calculate each team’s score *sorted in descending order*.

Problem

- Points for soccer teams: preliminary



Problem

- Points for soccer teams: preliminary

```
XTWTTTTTTTTTTTTTTTT
TXTTTTTTTTTTTTTTTTT
LTXTTTTTTTTTTTTTTTT
TTTXTTTTTTTTTTTTTTT
TTTTXTTTTTTTTTTTTTT
TTTTTXTTTTTTTTTTTTT
TTTTTTXTTTTTTTTTTTT
TTTTTTTXTTTTTTTTTTT
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TTTTTTTTTTTTTTXTTTT
TTTTTTTTTTTTTTTXTTT
TTTTTTTTTTTTTTTTXTT
TTTTTTTTTTTTTTTTTXT
TTTTTTTTTTTTTTTTTTX
```
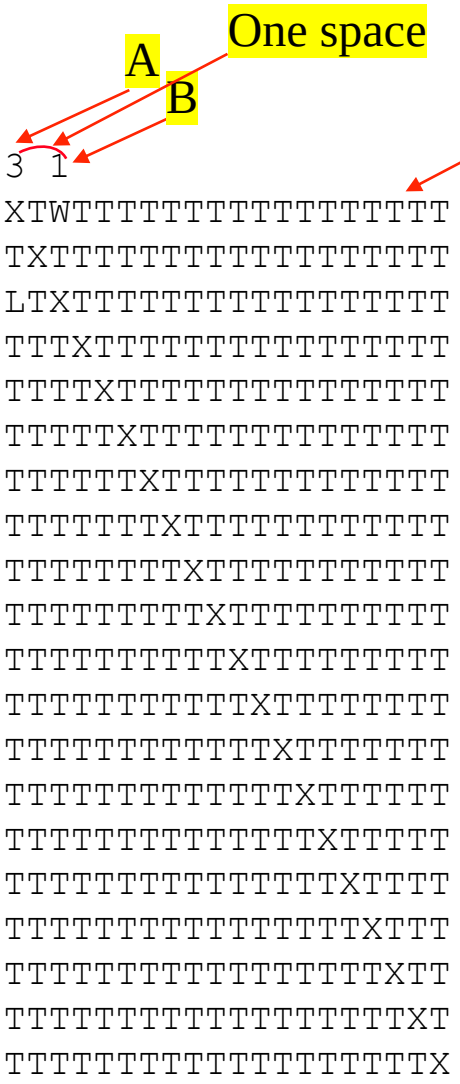
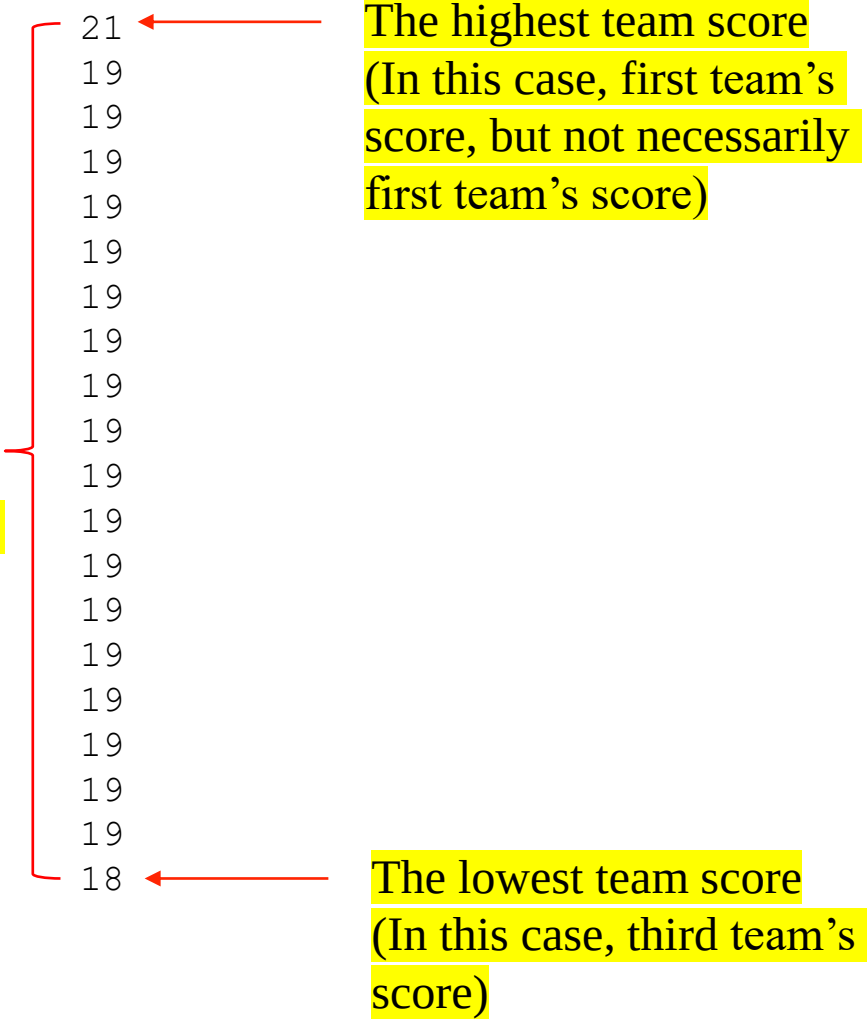

- (n,n) should be “X”.
- If (i,j) is “W”, (j,i) should be “L”.
- If (i,j) is “T”, (j,i) should be “T”.

Input/Output Format

- Input



- Output



Template

- Template
  - No C code template

Evaluation

- Evaluation
  - TA will test several cases.
  - For each test case,
    - If your C code results in an answer within 10 seconds on skku.goorm.io with gcc 11.1.0 complier,
      - If your answer is correct,
        - You get 100%.
      - Else,
        - You get 0%.
    - Else,
      - You get 0%.

Before submission, test your program on skku.goorm.io with gcc 11.1.0 complier! Otherwise, you may get zero point although your program works on your environment.