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# CSE113: Programming and Problem Solving
## Spring 2026
## Quiz - 4
## Duration: 35 Minutes

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**Q1** [7]

Assume you are working as a software engineer developing a search system. There are **n** user names stored in a database (array). Users can search for their names, and the system should suggest all names that contain the given substring.

To make the application user-friendly, write a function that takes a name and the substring as parameters to display all names that contain the entered substring.

**Input:**
- The first line contains an integer **n** (number of users).
- Next **n** lines each contain a user name (string may have spaces).
- The last line contains a substring of length **4**.

**Output:**
- Print all users' names that contain the given substring.

| Sample Input | Sample output |
|---|---|
| 6<br>Soul Goodman<br>Anna Marie<br>Annette Rose<br>Joanna Grace<br>Annika Noor<br>Hannah Claire<br>anna | Anna Marie<br>Joanna Grace<br>Hannah Claire |

**Note:** Matching should be case-insensitive.

**Q2** [6]

You are developing a simple monitoring system for a weather station. The system records temperatures (in °C) for **n** days and **3** different time slots per day (morning, afternoon, evening).

Now you need to display the maximum temperature along with the day and time slot where it occurred.

**Input:**
- The first line contains an integer **n** (number of days).
- Next n lines each line contains **3 integers** representing temperatures.

**Output:**
- Print the maximum temperature and position (day and time slot).

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| | | |
|---|---|---|
| | <table><tr><th>Sample Input</th><th>Sample output</th></tr><tr><td>3 3<br>30 32 31<br>29 35 33<br>28 34 36</td><td>Maximum Temperature: 36<br>Found at Day 3, Time Slot 3</td></tr></table><br>Hint: You can store the temperatures in a 2D array. | |
| **Q3** | Create a meme about your student life **and** write 2–3 lines about it.<br>Or,<br>Write 2-3 lines about your hobby. | [2] |

