Session 1: No AI Assistant

Rules:

1. You will receive 3 problems. Solve them in the order shown (top to bottom).
2. You can use the regular sources: official documentation, stackoverflow, google search etc.
3. **Do not use any AI assistant!**
4. Write your code in an Android or iOS application environment.
    - See documents in root for IDE installation if needed.
    - You will need to upload the project in the root of your folder.
5. Each problem has a time limit. If you exceed the time limit please stop and move to the next task (if any remaining).
6. Time your session. As soon as you think the solution is complete. Stop the timer and add it into the function documentation.
7. Screen record your session. You can record only the desktop/screen with the IDE.
    - You will upload your recording to the folder of this file.
8. Please do not scroll to the problems section (below) until you are prepared to start (editor ready, recording ready).
9. Upload the resulted project in the root of your folder.
10. Maximum time for entire session: 1h.

Example:

Task:
Write a program that takes two numbers as input and determines the maximum of the two numbers. The program should output the maximum number.

Solution:

```
// Task1: Write a program that takes two numbers as input and determines the maximum of the two numbers. // The program should output the maximum number.
// Time: 4:45
fun max(a: Int, b: Int): Int {
    return if (a > b) a else b
}
```

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Tasks below… stop scrolling if you are not ready…

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Task 1:
Time limit: 10 minutes

OL3: Write a function that receives an array of arrays containing Strings and flattens it into one array with unique elements while preserving the order of the input arrays. The function must return the resulting array.
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Task 2:
Time limit: 20 minutes

OM1: Write a function that validates a card limit given as String and returns an Enum having a case when the limit is valid and the other cases representing reasons of failure. The card limit is considered invalid if it cannot be converted to an integer if it's below 0 if it's above 10.000 and if it is not divisible by 100.
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Task 3:
Time limit: 30 minutes

OI2: Write a platform-specific value type that represents a Banking Card with the following properties `Identity` of type UUID, `FPAN` of type String, and `Holder` as an optional String property. Make the type copyable, capable of returning a hash code based on its properties and serializable.
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