**ARRAY METHODS **

(Use any array methods you know — no loops & no functions)

STUDENT MANAGEMENT SYSTEM — INSTRUCTIONS

Follow each step **in order** based on your knowledge of array operations.

STEP 1 — Create the initial list

Create an array named **students** containing the following names:

```
"Dania", "Omar", "Lina", "Rami"
```

STEP 2 — Add a new student to the end

Add `"Sara"` to the **end** of the students list.

STEP 3 — Add a new student to the beginning

Add `"Adam"` to the **beginning** of the list.

STEP 4 — Update a name

A student changed their name: Replace `"Lina"` with `"Lamar"` inside the list.

STEP 5 — Remove the last student

Remove the **last** student from the list and store the removed value in:

```
removedLast
```

STEP 6 — Remove the first student

Remove the **first** student from the list and store the removed value in:

```
removedFirst
```

STEP 7 — Check if a name exists

Check whether the name `"Rami"` still exists in the list and store the result in:

```
hasRami
```

STEP 8 — Find the position of a student

Find the position (index) of `"Omar"` inside the list and store it in:

```
omarIndex
```

STEP 9 — Create a new group

Create a new list called **groupA** containing only the **first two** students from the current list.

STEP 10 — Merge groups

Create a second group:

```
groupB = ["Nour", "Tala"]
```

Combine **groupA** and **groupB** together into a new list named:

```
allGroups
```

STEP 11 — Create a readable text version

Convert the `allGroups` list into a single string, separating each name with `" | "`. Store this text inside:

```
groupString
```

STEP 12 — Sort alphabetically

Sort the main **students** list alphabetically.

STEP 13 — Reverse the order

Reverse the sorted list so the order becomes descending instead of ascending.

★ STEP 14 — Modify a list using a single command

Create the following list:

```
seats = [1, 2, 3, 4, 5];
```

Replace the **middle three items** with the word `"Reserved"` in one array operation and store the result in:

```
reservedSeats
```

(The final shape must be:)

```
[1, "Reserved", "Reserved", "Reserved", 5]
```

STEP 15 — Convert an array to text

Convert the final version of the main `students` list into a single string. Store it in:

```
studentsString
```

STEP 16 — Final Output

Display all of the following:

```
students
removedLast
removedFirst
hasRami
omarIndex
groupA
allGroups
groupString
reservedSeats
studentsString
```