

Computer Science II - Prepa Tec Campus Eugenio Garza Lagüera
First Partial Lab

Hand in your answers to all problems by hand.

Problem 1.1: Design a class called `CreditCard` that can model a credit card. List 5 attributes with their respective data types, and 4 methods with a brief description of what they would do. There is no need to code this class.

Problem 1.2: Using the class defined in problem 1.1, think of three objects (or instances) of the `CreditCard` class, and assign unique values to each of its 5 attributes.

Problem 2.1: Sort the following arrays using both Bubble and Selection Sort, showing all procedures.

0	14	43	-2
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1	3	10	4	5
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Problem 3.1

Code a static method that receives an array of Strings, and returns a copy of the same array, with its elements inverted.

```
public String[] invertArray(String[] in)
```

For example

- `invertArray({"a","b","c"}) → ({"c","b","a"}`
- `invertArray({"1","2","3", "4"}) → ({"4","3","2","1"}`

Problem 3.2

Code a static method that returns a new array of characters without any duplicates on it.

```
public char[] removeDuplicates(char[] in)
```

For example

- `removeDuplicates({'1','1','2','1'}) → {'1','2'}`
- `removeDuplicates({'b','d','a','b','f','a','g','a','a'}) → {'b','d','a','f','g'}`