

Lab1

- Create a student literal object that contains: name, University, faculty, and final grade, and use print his data in the console using template literals in this format:

{Std_name} is a student in faculty of {fac_name} in university {Uni_name}

And his final grad is {grad}.

- Create an Object called “Teacher” derived from the Person object, and implement a method called teach which receives a string called subject , and prints out:

[Teacher’s name] is now teaching [subject]

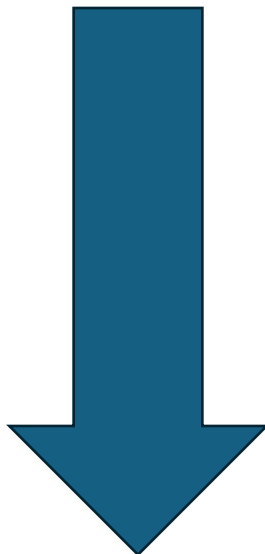
- Create class called “vehicle”

The class has constructor function that takes 2 parameters (wheels , speed)

Create a sub-class “bike” that inherit from vehicle and has different default values

Add static method to bike sub-class to count how many times we instantiate object from vehicle

To be continue 😊



Build a Simple Banking System

Create a banking system using **constructor functions and prototypes**. The system should include the following:

1. Base Class: Account

- Properties: accountNumber, balance
- Method:
 - deposit(amount): Increases the balance
 - withdraw(amount): Decreases the balance (but should not allow overdrawing)
 - getBalance(): Returns the balance

2. Child Classes:

- **SavingsAccount** (inherits from Account):
 - Additional Property: interestRate
 - Method:
 - addInterest(): Adds interest to the balance
- **CurrentAccount** (inherits from Account):
 - Additional Property: overdraftLimit
 - Override:
 - withdraw(amount): Allows withdrawing up to balance + overdraftLimit

3. Demonstrate Usage

- Create objects of SavingsAccount and CurrentAccount
- Perform deposits, withdrawals, and other actions
- Show method overriding in CurrentAccount

What I expect

Create objects of SavingsAccount and CurrentAccount

Perform deposits, withdrawals, and other actions

Show method overriding in CurrentAccount

Example

```
const savings = new SavingsAccount(101, 5000, 0.05);  
savings.deposit(1000);  
console.log(savings.getBalance()); // 6000  
savings.addInterest();  
console.log(savings.getBalance()); // 6300 (5% interest added)  
  
const current = new CurrentAccount(102, 2000, 1000);  
current.withdraw(2500);  
console.log(current.getBalance()); // -500 (overdraft used)  
current.withdraw(600); // Should show an error: "Withdrawal limit exceeded"
```