# TS Advanced: Retake Exam - 25.01.20

# Problem 2. Bank Operations

**export** **class BankOperations** {  
 *//* ***TODO: implement this class...***  
}

### Your Task

### Write a BankOperations class, which supports the described functionality below. Firstly, import the Operations interface and the BankOffice class.

### Functionality

#### constructor()

Receives **no** parameters at initialization of the class

#### depositMoney({customerID}, {amount})

Both the **customerID** and the **amount** are **numbers**

* Check if the given **customerID** corresponds to a customer in the **customers** array (from the imported **BankOffice** class), if not throw a new error:

**"You have no customer with this ID"**

* Otherwise add a new property to the found customer **totalMoney** and the **amount of money** as value.

#### withdrawMoney({customerID}, {amount})

Both the **customerID** and the **amount** are **numbers**

* Check if the given **customerID** corresponds to a customer in the **customers** array (from the imported **BankOffice** class) and if the amount of money he has is more or equal to what he wants to withdraw, if not throw a new error:

**"{firstName} {lastName} does not have enough money to withdraw that amount"**

* Otherwise subtract the **amount** from the **totalMoney**

#### takeLoan({customerID}, {loanAmount}, {years})

All of the arguments are **numbers**

Use the following formula to check if the customer can take a loan:

**salary \* terms \* 12 – loanAmount > 0**

* Find the customer with the given **ID** (you will be given a valid ID) and check if he has a **valid contract**, if the **formula** returns a number greater than 0 and if the **terms** of his contract are more than the years to return the loan. If so add a property to the customer object **hasLoan**, set it to **true** and return a message:

**"{firstName} {lastName} has been given a loan for {years}"**

* Otherwise throw a new error:

**"{firstName} {lastName} cannot receive this loan"**

### Examples

This is an example how the code is **intended to be used**:

|  |
| --- |
| Sample code usage |
| **let operation = new BankOperations();**  **operation.depositMoney(1, 10000);**  **operation.withdrawMoney(1, 200);**  **console.log(operation.takeLoan(1, 10000, 2))** |
| Corresponding output |
| Ivan Ivanov has been given a loan for 2 years. |