

You have the following structure in your `data.yml` file.

```
```yaml
uk:
 name: "United Kingdom"
 currency: "GBP"
 cities:
 london:
 name: "London"
 coordinates: [51.497915, -0.107167]
 dublin:
 name: "Dublin"
 coordinates: [53.347547, -6.281021]
 banks: [
 "Barclays",
 "HSBC",
 "NatWest",
 "Lloyds",
 "Halifax",
 "Santander"
]
de:
 name: "Germany"
 currency: "EUR"
 cities:
 berlin:
 name: "Berlin"
 coordinates: [52.543623, 13.406660]
 frankfurt:
 name: "Frankfurt"
 coordinates: [50.129052, 8.681875]
 munich:
 name: "Munich"
 coordinates: [48.153909, 11.580281]
 hamburg:
 name: "Hamburg"
 coordinates: [53.554472, 10.010414]
 banks: [
 "Number 26",
 "ING",
 "Commerzbank",
 "Deutsche Bank",
 "Deutsche Kreditbank",
 "Comdirect",
 "Postbank",
 "Sparkasse HBCI",
 "Raiffeisen"
]
```
```

I want you to do the following:

* Classify data

1) Create a Country class, (instances should have [:name, :currency] attributes)
2) Create a City class, (instances should have [:name, :coordinates, :country] attributes)

3) Create a Bank class, (instances should have [:name, :city, :country, :max_credit_value, :min_credit_value, :interest_rate, :credit_time] attributes)

credit_time - is a random value from **Bank::CREDIT_TIMES** attribute, which is an array with the following values: [6, 12, 24, 36]

interest_rate - $5 + \text{random_value} * 1 / \text{credit_time} * 10$ (%) where **random_value** is a random value from **Bank::INTEREST_RATES = (3.0..5.0)**

(max_credit_value, min_credit_value, interest_rate are given randomly with values your prefer, more info below.

4) Create a Customer class, (instances should have [:full_name, :city, :country, :age, :salary] attributes)

5) Create a Credit class, (instances should have [:customer, :bank, :amount, :paid_amount, :start_date, :end_date])

* Create instances

1) Using any way to read the data from file (using YAML library is preferred) convert data into an ruby object

2) Choose a random bank (by code) and create an instance of it.

Hint: Create an array which include all given banks and take a sample.

* Enrich your classes

1) Add **:full_name** method to a class, that should return a full name of a bank.
Example:

Raiffeisen => "Raiffeisen bank, Berlin, Germany"

Commerzbank => "Commerzbank, Munich, Germany"

Santander => "Santander bank, London, United Kingdom"

Note: don't write "bank" if bank_name includes `bank` inside.

2) Write a **:issue_loan** method, which takes a customer instance, credit_amount, credit_time as arguments.

This method should raise a **CreditDenied** exception if customer cannot be served by the bank, otherwise returns a Credit instance.

- A customer can be served by a bank if:

- His age is over 18

- He lives in the same country.

- Credit amount he wants to take is in the range of bank **min_credit_value** and **max_credit_value**

- customer monthly debt is 30% less then customer's salary:

HINT:

monthly_debt = (credit_amount / credit_time + credit_amount / credit_time * interest_rate)

3) Write **:pay** method which will increase credit's **:paid_amount** by given as argument amount (or 50% of customer's salary by default)

*** Execute your code:**

- 1) Create a customer
- 2) Check if a bank can give a loan to your customer, if does → create it
- 3) Pay customer's debt once.