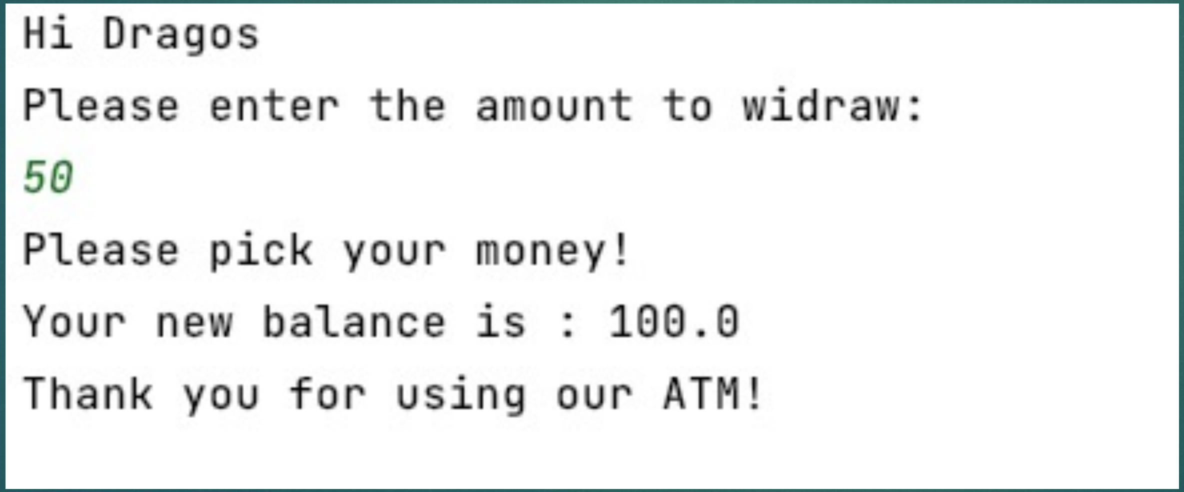
Homework

KeyTraining

Homework.

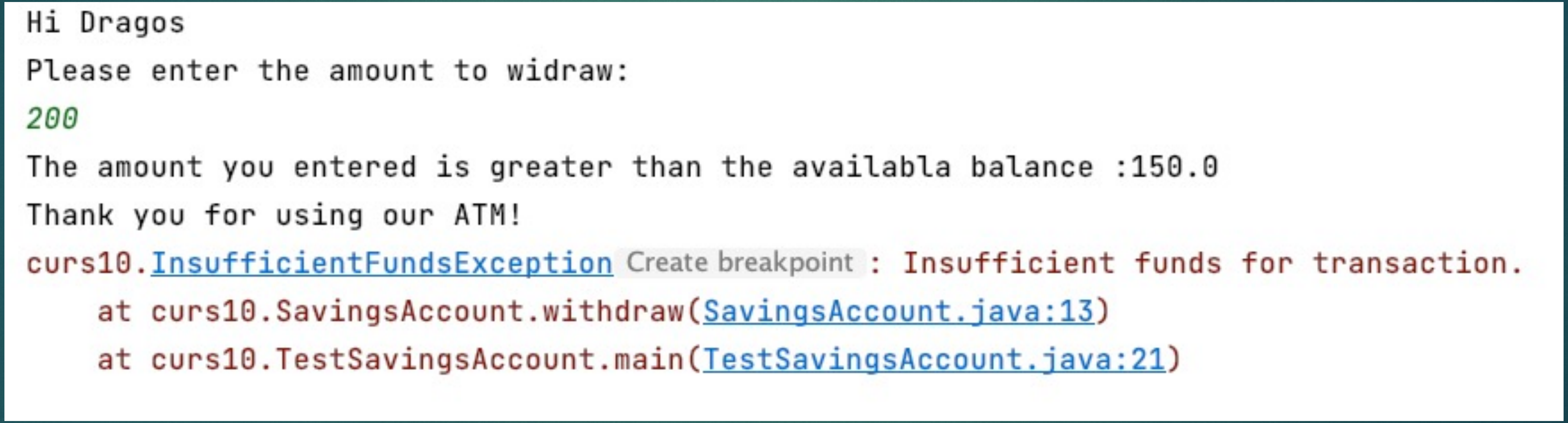
- Vom scrie un program care simuleaza o mica parte dintr-un sistem bancar.
- Programul va functiona astfel :
  Clasa de test, va simula un withdraw de la un ATM.
- Daca userul are suficienti bani in cont va printa noua balanta dupa retragere si mesajele “Please pick your money!” si ”Thank you for using our ATM”
- EX :



```
Hi Dragos
Please enter the amount to widraw:
50
Please pick your money!
Your new balance is : 100.0
Thank you for using our ATM!
```

Homework.

- Daca userul nu are suficienti bani va arunca o exceptie si va printa : "The amount you entered is greater than the available balance :" + balance si "Thank you for using our ATM" si printam si stackTrace-ul exceptiei



```
Hi Dragos
Please enter the amount to widraw:
200
The amount you entered is greater than the availabla balance :150.0
Thank you for using our ATM!
curs10.InsufficientFundsException Create breakpoint : Insufficient funds for transaction.
    at curs10.SavingsAccount.withdraw(SavingsAccount.java:13)
    at curs10.TestSavingsAccount.main(TestSavingsAccount.java:21)
```

Homework.

Pentru implementare avem 4 clase (+ 1 pentru executie) :

1. Clasa Customer care contine trei variabile private ”name”, ‘address’, “email”
2. Valoarea variabilelor se va seta la chemarea constructorului in clasa de executie(customer = new Customer (“ion”, ”adresa”, etc))

- Clasa Account care contine:
  - 3 variabile : 1 variabila private de tip int “accountNumber”
  - 1 variabila publica de tip double “balance”
  - 1 variabila publica de tip Customer pe nume ‘accountOwner’
  - Valoarea variabilelor se va seta la chemarea constructorului in clasa de executie
  - O metoda abstracta withdraw care primeste ca argument suma ce trebuie retrasa si arunca exceptia InsufficientFundsException

Homework.

Clasa InsuficientFundsException care este o clasa de exceptie custom. Extinde Exception si seteaza in constructor mesajul “Insuficient funds for transaction”

Clasa SavingsAccount care mosteneste Account

Seteaza in constructor accountOwner, balance si accountNumber

Suprascrie metoda withdraw unde implementeaza:
- daca suma ce urmeaza a fi retrasa este mai mare decat balanta curenta, arunca InsuficientFundsException
- altfel scade suma ce urmeaza a fi retrasa din balanta

Homework.

Clasa de executie TestSavingsAccount care simuleaza ATM –ul.

Creaza un obiect de tip Customer

Creaza un obiect de tip SavingsAccount

Saluta userul “Hi ” + name

Intreba userul ” Please enter the amount to widraw”

Executa logica descrisa in pozele din primele 2 slide-uri.