

Solution Review: Handling a Bank Account

This review provides a detailed analysis to solve the 'Handling a Bank Account' challenge.

WE'LL COVER THE FOLLOWING



- Solution
- Explanation
 - Methods in the Account Class
 - Methods in the SavingsAccount Class

Solution

```
class Account: # parent class
    def __init__(self, title=None, balance=0):
        self.title = title
        self.balance = balance
    # withdrawal method subtracts the amount from the balance

    def withdrawal(self, amount):
        self.balance = self.balance - amount
    # deposit method adds the amount to the balance

    def deposit(self, amount):
        self.balance = self.balance + amount
    # this method just returns the value of balance

    def getBalance(self):
        return self.balance

class SavingsAccount(Account):
    def __init__(self, title=None, balance=0, interestRate=0):
        super().__init__(title, balance)
        self.interestRate = interestRate
    # computes interest amount using the interest rate

    def interestAmount(self):
        return (self.balance * self.interestRate / 100)
```



```
obj1 = SavingsAccount("Steve", 5000, 10)
print("Initial Balance:", obj1.getBalance())
obj1.withdrawal(1000)
print("Balance after withdrawal:", obj1.getBalance())
```

```
print("Balance after withdrawl: ", obj1.getBalance())
obj1.deposit(500)

print("Balance after deposit:", obj1.getBalance())
print("Interest on current balance:", obj1.interestAmount())
```



Explanation

In each of the two classes, the initializers have already been defined for you.

Methods in the Account Class

- In **line 7**, we have defined the `withdrawal(amount)` *method*. It takes a number, `amount` as an input parameter and subtracts it from the `balance`.
- In **line 11**, we have defined the `deposit(amount)` *method*. It takes a number, `amount`, as an input parameter and subtracts it to the `balance`.
- In **line 15**, we have defined the `getBalance()` *method* that returns the value of balance.

Methods in the SavingsAccount Class

- We have defined the `interestAmount()` *method* that returns the amount of interest depending on the value of the `interestRate` defined at the time of the creation of the object.