## Digits extractor

```
package Mastery;
import java.util.Scanner;

class Num {
    private int number;

    String (int number) {
        this.number = number;
    }

    String int getWhole() {
        return number;
    }

    String getOnes() {
        return Math.abs(number) % 10;
    }

    String getTens() {
        return (Math.abs(number) / 10) % 10;
    }

    String getHundreds() {
        return (Math.abs(number) / 100) % 10;
    }
}
```

The errors I made with this code is

Error1: Remove the String return type. The constructor should only have the class name (Num) and parameters.

Error2: Change the return type of getWhole(), getOnes(), getTens(), and getHundreds() to int because they deal with integer values.

Error3: Add a main method to allow the program to run and test your Num class

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# Savings

```
public void removeCoins(String coinType, int amount) {
   if (coins.containsKey(coinType)) {
      if (coins.get(coinType) >= amount) {
            coins.put(coinType, coins.get(coinType) - amo
      } else {
            System.out.println("Not enough coins to remov
      }
    } else {
        System.out.println("Invalid coin type.");
   }
}

public void totalAmount() {
   return coins.get("pennies") * 0.01 +
        coins.get("nickels") * 0.05 +
        coins.get("dimes") * 0.10 +
        coins.get("quarters") * 0.25;
   }
}
```

#### Error1

- I was trying to return a double value from the totalAmount() method, but you didn't specify the return type (double).
- The method should return a double because it calculates a total amount in currency, which involves decimal values (like 0.01, 0.05, etc.).

#### Error2

 The totalAmount() method assumes that the keys in the coins map are "pennies", "nickels", "dimes", and "quarters",

### Error3

• In the addCoins and removeCoins methods, I was updating the coins map directly, but there is no check for whether the coinType exists in the coins map in the

addCoins method. If the coinType is invalid, the code doesn't add it, which may be intentional.

#### Error4

• I assumed that the coins map is already initialized, but there is no initialization shown in the code snippet.

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### LunchOrder

```
public static double getPrice() {
    return price;
}

public static void getFat() {
    return fat;
}

public static double getCarbs() {
    return carbs;
}

public static double getFiber() {
    return fiber;
}
```

- Error1 The methods getPrice(), getFat(), and getCarbs() are static, meaning they belong to the class itself and not to an instance of the class. As a result, they can only access static fields (variables that are also declared static).
- Error2 The method getFiber() is non-static (an instance method), meaning it is designed to access instance variables, which are tied to a particular instance of the class.