Dart lab3

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lab2

- A soldier wants to buy w bananas in the shop. He has to pay k dollars for the first banana, $2k$ dollars for the second one and so on (in other words, he has to pay $i \cdot k$ dollars for the i-th banana).
- He has n dollars. How many dollars does he have to borrow from his friend soldier to buy w bananas?
- **Input**
- The first line contains three positive integers k, n, w the cost of the first banana, initial number of dollars the soldier has and number of bananas he wants.
- **Output**
- Output one integer — the amount of dollars that the soldier must borrow from his friend. If he doesn't have to borrow money, output 0.

example

- Input: 3 17 4
- Output 13

Lab3

- Implement the extension function getFullInfo() returning a string value. It should list the properties of the class as in the example below and add "Unspecified" if the corresponding value is null:
- name: Alice
- email: alice@gmail.com
- country: Germany
- city: Munich
- street: Unspecified

```
void main() {
  var alice = Client('ALice', Personal Info(
      email = 'alice@gmail.com', address =
Address('Germeny', 'Munich')));
  print(alice.getFullInfo());
  print('---');
  print(Client('Bob').getFullInfo());
}
```

```
/* Output:
name: Alice
email: alice@gmail.com
country: Germany
city: Munich
street: Unspecified
---
name: Bob
email: Unspecified
country: Unspecified
city: Unspecified
street: Unspecified
*/
```

Lab4

- Define a class SimpleTimethat stores the time passed from the beginning of the day. It should take four arguments: hours, minutes, seconds and nanoseconds, where each argument has the default value of zero.
- Implement two member functions: toSecondOfDayand toNanoOfDayreturning the number of seconds and nanoseconds accordingly passed from the beginning of the day.

```
fun main(args: Array < String > ) {
    val noon = SimpleTime(12)
    println(noon.toSecondOfDay()) //eq 12 * 60 * 60

    val halfPastSeven = SimpleTime(hours = 6, minutes = 30)
    println(halfPastSeven.toNanoOfDay()) // eq 23400000000000

    val nanosecond = SimpleTime(nanoseconds = 1)
    println(nanosecond.toNanoOfDay()) // eq 1

    val second = SimpleTime(seconds = 1)
    println(second.toNanoOfDay()) // eq 1000000000
}
```