

Stock transaction program

Last month Indrek purchased some stock in Acme Inc. Here are the details of the purchase:

- The number of **shares** that Indrek purchased was 1500.
- When Indrek purchased the **stock**, he paid €32.87 per share.
- Indrek paid his stockbroker a **commission** that amounted to 2 percent of the **amount** he paid for the stock.

Two weeks later, Indrek sold the stock. Here are the details of the sale:

- The number of shares that Indrek sold was 1500.
- He sold the stock for €33.92 per share.
- He paid his stockbroker another commission that amounted to 2 percent of the amount he received for the stock.

Write a program that prints out the following information:

1. The amount of money Indrek paid for the stock.
2. The amount of commission Indrek paid his broker when he bought the stock.
3. The amount that Indrek sold the stock for.
4. The amount of commission Indrek paid his broker when he sold the stock.
5. Print out the amount of money that Indrek had left when he sold the stock and paid his broker (both times).
6. If this amount is positive, then Indrek made a profit. If the amount is negative, then Indrek lost money. Print out the outcome (i.e., profit or loss).

Property tax

A county collects property taxes on the assessment value of property, which is 60 percent of the property's actual value. For example, if an acre of land is valued at €10,000 its assessment value is €6,000. The property tax is then 64¢ for each €100 of the assessment value. The tax for the acre assessed at €6,000 will be €38.40. Write a program that asks for the actual value of a property and prints out the assessment value and property tax.

Total Purchase

A customer in a store is purchasing some **items**. Write a function that takes as input two dictionaries, one with the **prices** and the other one with the purchased items, and calculates the total of the sales including **taxes**. Let us assume that the sales tax is 6 percent. A Consider the following skeleton for your function:

```
def calculateTotalSales(prices, purchasedItems):
    # prices is a dictionary
#   - key   name of the product
#   - value price of the product
# purchasedItems is also a dictionary
#   - key   name of the product
#   - value number of items
# Example:
# prices      {'productA': 10.0, 'productB': 20.0, 'productA': 30.0}
# purchasedItems {'productA': 15}
```