Name: _____

COMP 110 - Quiz #10 Practice

Q1: We need to write a new `BankCustomer` class to represent a single customer at a bank. Each customer has a unique ID (an instance variable named `customer_id`), as well as some number of accounts (e.g. checking or saving), each with their own balance. The accounts will be stored in a dictionary (named `accounts`) where the key is an ID for the account (*not* the same as the `customer_id`) and the value is the balance for the account. All IDs will be integers while balances will be floating point values (e.g. 24.35 to represent $23.45).

Start by completing the constructor (i.e. `__init__`). You will need to initialize the accounts instance variable so that it contains only a single account at the beginning, with the account ID and initial balance given as parameters to the constructor.

```
class BankCustomer:
  def __init__(self, cust_id, account_id, initial_balance):
    self.customer_id = cust_id
    # To Do: Initialize accounts instance variable to contain a single account
    #   with the given ID and balance
```

Q2: Write a `BankCustomer` method named `add_account`. This will add a new account to the bank customer (self). In addition to self, this method should have to parameters, `account_id` and `initial_balance`, which will have the account info to add to the accounts dictionary.

Q3: Write a `BankCustomer` method named `get_total_balance`. This will return the total balance across all of the accounts for the customer. For example, if the customer had 3 accounts, with balances of 50.00, 25.00, and 100.00, this method would return 175.00. Recall that you can get all of the values in a dictionary using the `values()` method.

Q4: Write some code that creates a `BankCustomer` object and assigns it to a variable named `p_parker`, adds a new account to this customer (using the method in Q2) with account ID 751552 and an initial balance of 100.00, and then prints out the total balance for the customer (using your method from Q3). This customer should have an ID of 55, while the initial account id and balance should be 215116 and 350.00.