

Activities: Classes 4

(Continuation)

Make sure you have finished the previous activity before you go on.

Create a class `Item` that models merchandise to be sold. An item has an item name and an item-identifier. The item-identifier is assigned when the object is created.

We now create a class `Transaction` that models the selling of an item. A transaction has an automatically generated identifier, involves a customer, an item, a price per item, and a quantity. To automatically generate an identifier, the class needs to contain a class variable that is incremented whenever a transaction is generated.

Create a function `sell(item, quantity, price, customer)` that returns `True` if the customer has enough credit and `false` otherwise. Alternatively, have it raise an exception. If the sale passes, then a transaction is generated.

All classes should have `str` and `repr` dunder methods. Test your method with a history of successful and unsuccessful sales to at least two different clients.