

Design and implement a class named `StockItem` that can be used to keep track of items in stock at a store. You must:

- choose conventional & appropriate instance variable, method, and formal parameter names
- choose appropriate data types for the specifications above
- be consistent with information-hiding principles
- follow standard Coding Standards and conventions

Each stock item object must include the following:

- a description of the item
- a positive, integer id number
- a price rounded to the nearest penny
- the quantity of the item that is currently in stock

When a `StockItem` object is instantiated, the client programmer must be able to initialize it with a description, a price, and a current quantity. Also, a unique id number must be generated for each newly instantiated stock item object.

Operations on a stock item include the following:

- retrieve the description of the item
- retrieve the id number of the item
- retrieve the price of the item
- retrieve the quantity of the item that is currently in stock
- set a new price for the item
- remove some quantity of the item from the quantity in stock
- add some quantity of the item to the quantity in stock