

# Online Auction Project

Solution to the following problem using the latest released version of Java and JUnit framework.

Consider a new and different computerized auction site where a seller can offer an item up for sale and people can bid against each other to buy the item. The algorithm can be automatically determining the winning bid after all bidders have entered their information on the site. Eventually this component can be integrated into the main website.

Input three parameters:

*Starting bid* - The first and lowest bid the buyer is willing to offer for the item.

*Max bid* - This maximum amount the bidder is willing to pay for the item.

*Auto-increment amount* - A dollar amount that the computer algorithm will add to the bidder's current bid each time the bidder is in a losing position relative to the other bidders. The algorithm should never let the current bid exceed the Max bid. The algorithm should only allow increments of the exact auto-increment amount.

Here is the data to use for your testing. In each case the algorithm should determine the winning bidder and the amount of the winning bid. The bidders are listed in the order they entered their information on the site. If there is a tie between two or more bidders, the first person that entered their information wins. The amount of the winner's bid should be the lowest amount possible (given all the previous rules) that will win the auction.

	Auction One - Bicycle	Auction Two - Scooter	Auction Three - Boat
<b>Bidder: Alice</b>			
Starting bid	\$50	\$700	\$2,500
Max bid	\$80	\$725	\$3,000
Auto-increment amount	\$3	\$2	\$500
<b>Bidder: Aaron</b>			
Starting bid	\$60	\$599	\$2,800

<b>Max bid</b>	\$82	\$725	\$3,100
<b>Auto-increment amount</b>	\$2	\$15	\$201

**Bidder: Amanda**

<b>Starting bid</b>	\$55	\$625	\$2,501
<b>Max bid</b>	\$85	\$725	\$3,200
<b>Auto-increment amount</b>	\$5	\$8	\$247