## The Bid Calculation Tool

### Task Description

Develop an application that will allow a buyer to calculate the total price of a vehicle (common or luxury) at a car auction. The software must consider several costs in the calculation. The buyer must pay various fees for the transaction, all of which are calculated on the base price amount. The total amount calculated is the winning bid amount (vehicle base price) plus the fees based on the vehicle price and vehicle type. Fees must be dynamically computed.

### Requirements

* There is a field to enter the vehicle base price
* There is a field to specify the vehicle type (Common or Luxury)
* The list of fees and their amount are displayed
* The total cost is automatically computed and displayed every time the price or type changes

#### Fixed and Variable Costs

* Basic buyer fee: 10% of the price of the vehicle
  + Common: minimum $10 and maximum $50
  + Luxury: minimum 25$ and maximum 200$
* The seller's special fee:
  + Common: 2% of the vehicle price
  + Luxury: 4% of the vehicle price
* The added costs for the association based on the price of the vehicle:
  + $5 for an amount between $1 and $500
  + $10 for an amount greater than $500 up to $1000
  + $15 for an amount greater than $1000 up to $3000
  + $20 for an amount over $3000
* A fixed storage fee of $100

#### Calculation Example

* Vehicle Price (Common): $1000
* Basic buyer fee: $50 (10%, min: $10, max. $50)
* Special fee: $20 (2%)
* Association fee: $10
* Storage fee: $100
* **Total**: $1180 = 1000$ + 50$ + 20$ + 10$ + 100$

#### Test Cases

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Vehicle Price ($) | Vehicle Type | Fees ($) | | | | Total ($) |
| **Basic** | **Special** | **Association** | **Storage** |
| 398.00 | Common | 39.80 | 7.96 | 5.00 | 100.00 | **550.76** |
| 501.00 | Common | 50.00 | 10.02 | 10.00 | 100.00 | **671.02** |
| 57.00 | Common | 10.00 | 1.14 | 5.00 | 100.00 | **173.14** |
| 1800.00 | Luxury | 180.00 | 72.00 | 15.00 | 100.00 | **2167.00** |
| 1100.00 | Common | 50.00 | 22.00 | 15.00 | 100.00 | **1287.00** |
| 1000000.00 | Luxury | 200.00 | 40000.00 | 20.00 | 100.00 | **1040320.00** |