Develop software using dynamic arrays (using the smart pointers) that allows a user to enter the names of the athletic equipment below.

1. If Tom purchases four pairs of Nike basketball shoes, three Under Armour T-shirts, four Under Armour shorts, and one pair of Asics running shoes; print a receipt for the purchase including the total cost before and after tax. Assume the tax rate is 7.75%
2. Print an inventory list before and after Tom’s purchase.
3. Your program **must** use at one pointer variable.
4. Your program **must** use at least on user defined namespace.s
5. Your program **must** use at least three preprocessor directives.

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| --- | --- | --- |
| Name of equipment | Cost | Quantity |
| Nike basketball shoes | $159.99 | 72 |
| Under Armour T-shirt | $25.99 | 53 |
| Brooks running shoes | $119.44 | 9 |
| Asics running shoes | $165.88 | 44 |
| Under Armour shorts | $45.77 | 88 |

Due September 18th