Onkar Dhillon
Professor Vitale
Stock Calculator

Test Plan

We will first start with running the program of course. I will start with testing the Total Realized Capital Gain option to see it was zero. Then we will run our steps.

1. Bought 100 shares at $10.50 each.
2. Bought 50 shares at $12.75 each.
3. Bought 200 shares at $9.80 each.
4. Sold 50 shares at $13.00 each.
   Expected Capital Gain: (13.00 - 10.50) * 50 = $125.00
5. Sold 100 shares at $11.00 each.
   Expected Capital Gain: (11.00 - 10.50) * 50 = $25.00
   Expected Capital Gain: (11.00 - 12.75) * 50 = -$87.50 + $50.00 = $62.50
6. Selected "Total Realized Capital Gain".

Output displayed "Your current total realized capital gain is: $62.50".

7. Bought 150 shares at $15.25 each.
8. Sold 75 shares at $16.50 each.

Expected Capital Gain: (16.50 - 9.80) * 75 = $502.50 + $62.50 = $565.00

9. Bought 200 shares at $14.00 each.
10. Sold 300 shares at $18.00 each.

Expected Capital Gain: (18.00 - 9.80) * 125 = $1025.00 + $565.00 = $1590.00
Expected Capital Gain: (18.00 - 15.25) * 150 = $412.50 + $1590.00 = $2002.50
Expected Capital Gain: (18.00 - 14.00) * 25 = $100.00 + $2002.50 = $2102.50

11. Selected "Total Realized Capital Gain".

Output displayed "Your current total realized capital gain is: $2102.50".

12. Tried to sell 400 shares (more than available).

Output displayed "You do not have enough shares to sell."

13. Selected "Total Realized Capital Gain".

Result: Output displayed "Your current total realized capital gain is: $1368.75".

14. Entered invalid input for number of shares and price.
15. Repeated the process until valid input was provided.

Result: Program prompted for valid input and continued execution as expected.

16. Choose the "Quit" option.

Result: Program terminated successfully.