```
function [totalInvestment,...
            totalRevenue,...
            totalValue,...
            portfolioMod]...
            = calcInvestment(...
                portfolio,...
                exchange)

    % This function will search
    % through the transaction
    % history of the specified
    % portfolio and add up all the
    % buy and sell values to determine
    % the total amount of money that
    % has been invested and the total
    % that has been returned from sales.
    % This will also calculate the total
    % value of the portfolio at the present
    % time.

    totalInvestment = 0;
    totalRevenue = 0;
    totalValue = 0;

    % Calculate total investment and
    % total revenue.
    for i = (1:size(portfolio.transactions,1))
        if(strcmp(portfolio.transactions(i,1),'BUY'))
            totalInvestment = totalInvestment...
                + portfolio.transactions{i,11};
        elseif(strcmp(portfolio.transactions(i,1),'SELL'))
            totalRevenue = totalRevenue...
                + portfolio.transactions{i,11};
        else
            % Error.
        end
    end

    % Calculate the total value of the
    % portfolio.

    % Loop through all the stock symbols in
    % the portfolio.
    for i = (1:length(portfolio.stockSymbols))
        % Search exchange for corresponding symbol.
        [flag,currentStock] = getStockData_exchange(...
            exchange,portfolio.stockSymbols(i));
        if(flag == 0)
            % Error.  Stock not found in exchange.
            totalInvestment = -1;
            totalRevenue = -1;
```

```
            totalValue = -1;
            return;
        else
            totalValue = totalValue ...
                + (currentStock.currentPrice ...
                * portfolio.stockShares(i));
        end
    end

    % Save information to the portfolio.
    portfolio.totalInvestment = totalInvestment;
    portfolio.totalRevenue = totalRevenue;
    portfolio.totalValue = totalValue;

    % Make sure to return the
    % updated portfolio struct.
    portfolioMod = portfolio;

    return;

end
```