



Database Systems

Laboratory Worksheet 4 Year 3 – SE Batch

Writing Member Methods

1. Implement the following methods for the object tables STOCKS and CLIENTS (of Practical 3):
 - (a) A method to compute the yield of stocks: Yield is the dividend expressed as a percentage of the current price ($\text{yield} = (\text{dividend}/\text{current price}) * 100$). Assume that all dividends are for a period of one year.
 - (b) A method to compute the current price of stocks in US dollars, taking the current exchange rate of AUD to USD as an input parameter (assuming that the prices in the STOCKS table are in AUD).
 - (c) A method to count the number of exchanges where a given stock is traded.
 - (d) A method to compute the purchase value of all the shares of a client (for each share purchased, $\text{purchase value} = \text{purchase price} * \text{qty}$).
 - (e) A method to compute the total profit on all the shares of a client (for each share purchase, $\text{profit} = (\text{current price} - \text{purchase price}) * \text{qty}$).
2. Answer the following queries on STOCKS and CLIENTS tables. Use methods wherever possible.
 - (a) Get the yield of all stocks along with their current prices in US dollars, given an exchange rate of 0.74 USD to an AUD. Display the name of the stock, the exchanges where the stock is traded, the stock's yield and the price in USD.
 - (b) Find the company name, current price and the number of exchanges for shares that are traded on more than one exchange, using one of the methods.
 - (c) For each client, get the name, and the list of investments with stock name, yield, current price and earnings per share. Use the method for computing yield in this query.
 - (d) Find the total purchase value of investments for all clients. Display client name and total value. Use the method for computing purchase value in this query.
 - (e) For each client, list the book profit (or loss) on the total share investment. Use the method for computing profit.