



Management Information Systems

- Data Management – Advanced Data Manipulation

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Data From Multiple tables

1. Display the customers for each agent
2. Display all accounts for each customer
3. Display the customers of Thomas James
4. Display historical monthly stock prices for dell computers
5. Display all stock transactions for account 1003

Data From Multiple tables

6. Display all stock transactions for Virginia Russell
7. Display all stock transactions for the customers of Thomas James
8. Display all retail stock transactions for the customers of Thomas James
9. Display all retail stock transactions for the customers of Thomas James in 1999

Data Types

- Character
 - char, varchar(n)
- Numeric
 - smallint short
 - integer long or integer
 - real single
 - float double

Data Types

- Date
 - date
- Others
 - bit
 - longbinary
 - longtext
- datetime

Creating Tables

- Student
 - studentId
 - Firstname
 - Lastname
 - Address
 - City
 - Zip
 - Phone

Aggregate functions

- `count( )`
- `sum( )`
- `average( )`
- `max( )`
- `min( )`
- Group By and Having clauses

Aggregate Functions - Continued

10. Find the beta of stocks
11. Find the value of all transactions
12. Find the total number of retail stocks
13. Find the minimum and maximum eps
14. Find the total number of transactions for dell computers
15. Find the total number of accounts for Thomas James

Summarizing Data by Groups

- GROUP BY column_name[,...]
 - HAVING
16. Find the beta of stocks by industry
 17. Find the value of all transactions for each customer
 18. Find the total count of stock tickers by industry
 19. Find the minimum and maximum eps in each industry
 20. Find the total number of accounts for each agent

Advanced Query Features

- Aggregate Functions
- Summarizing Data by Groups
- Joining Tables
- Sub-Queries
- Correlated Sub-Queries
- Other Multi-Table Operators
- Views

Aggregate Functions

21. List customers by risk adversity (ascending average Beta)
22. List total number shares and value of shares purchased for each customer
23. List genderwise summary of number shares and value of shares purchased
24. List customers by frequency of transactions
25. List the number of transaction, shares transacted and value by industry for each industry if there were more than traded more than two transactions

Aggregate Functions

26. List the months and the number of transactions in ascending order of frequency of transactions
27. List the stocks in heavily traded to infrequently traded sequence by frequency
28. List stocks by the value of the trades