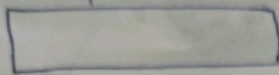## OLTP

OLTP Stands for Online Transaction Processing. It refers to a class of Systems that Manage transaction-oriented applications, typically for data entry and retrieval transaction processing. These Systems are Optimized for Managing large Numbers of Short, atomic transactions that typically Involve inserting, Updating, or deleting Small amounts of data.

OLAP

OLAP Stands for online Analytical Processing. It Refers to a class of Systems designed to Perform complex queries and Analysis on large Amounts of data, typically Stored in data warehouse. Unlike OLTP Systems, which focus on transaction Processing, OLAP Systems are optimized for data retrieval and are Used for Business Intelligence, Reporting, and data Mining Purposes.
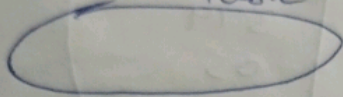
Er.win model

factTable

□ → Entity

↑ Dimension
Table

⬭ → Attributes

◇ → Relationship

(Stu_id)   (Pho id)

┌─────────┐   (Course)
│ Student │
└─────────┘

(Name)

◇ Book →   ┌─────────┐
            │ Library │
            └─────────┘

(Book)

(Book Name)

(Author)

◇ Borrow   (Category)

(Customer Name)   (Customer id)   (Package Name)

┌──────────┐   (Address)   ┌──────────┐   → (Package id)
│ Customer │   │ Travel   │
└──────────┘   │ company │
                                  └──────────┘
(Mail id)   ◇ Tour
                                                    (Destination)
   (Ph.No) ◇ commission   ◇ Sale (Price)

            ┌────────┐
            │ Travel │ → (Agent id)
            │ Agent │
            └────────┘

(Branch)   (Agent Name)