LONDON METROPOLITAN UNIVERSITY

islington college
(इस्लिङ्टन कलेज)

## Module Code & Module Title

CC6001NA Advance Database System Development

## Assessment Weightage & Type

40% Individual Coursework

## Year and Semester

2019-20 Autumn

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# 1. Textual Analysis

The following are the textual analysis of the questions:

- A Company can have many number of staff.

- A Company can have many number of tour packages.

- A Company can have assigned many tour guides for a tour.

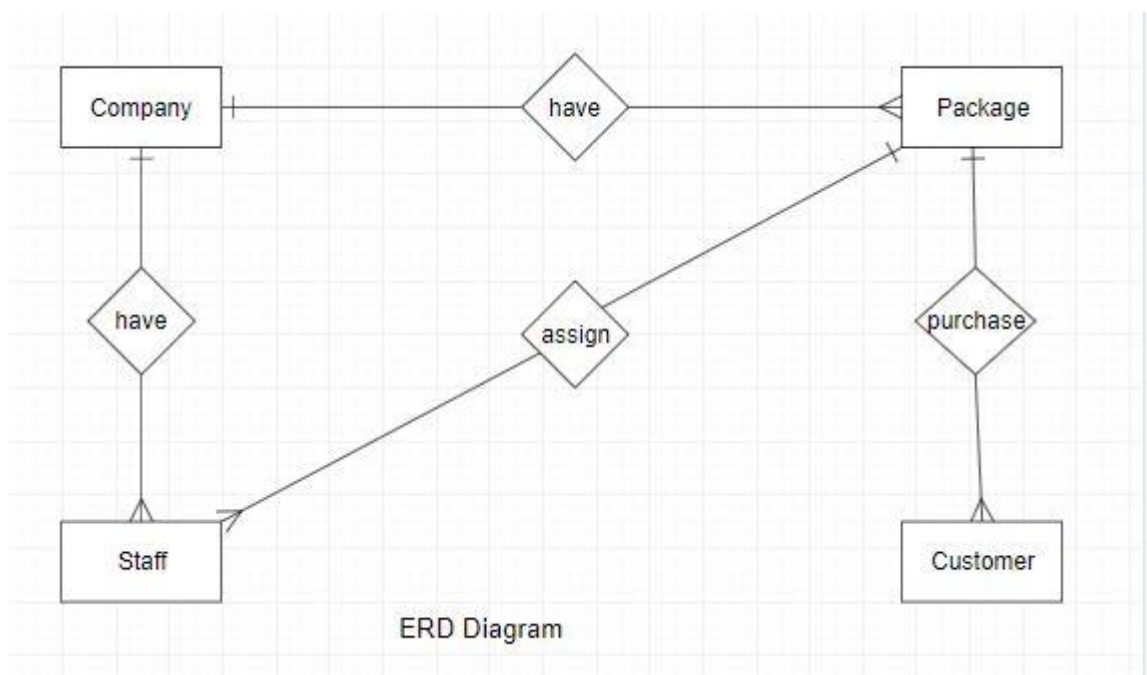- A Customer can take many packages but one at time.



*Figure 1 ERD of Textual Diagram*

## 2. Normalization

### 2.1. Assumption

- In the normalization destination-id has been assumed as repeating group.

The following normalization of Package Record:

| Package ID | Package Name | Destination | Total No of Days | Difficulty |
|---|---|---|---|---|
| LK25A | ABC | Annapurna Base Camp | 7 | Moderate |
| UI32A | Ghandruk | Ghandruk, Pokhara | 4 | Moderate |
| NB34G | Everest Short Trek | Lukla, Khumjung | 4 | Hard |

*Table 1Table of Package Record*

**UNF**

Package (package-id, package name, total no of days, difficulty, {destination-id, destination})

**1NF**

- **Removing Repeating Group**

**Tables**

Package-1(**package-id**, package name, total no of days, difficulty)

Package-Destination-1(**package-id, destination-id**, destination)

**2NF**

- **Removing Partial Dependency**

package-id ->

package-id, destination-id->

destination-id-> destination

**Tables**

Package-2(**package-id**, package name, total no of days, difficulty)

Package-Destination-2(**package-id, destination-id**)

Destination-2(**destination-id**, destination)

**3NF**

- **Removing Transitive Dependency**

Since there is not transitive dependency. It is in 3NF.

Package-3(**package-id**, package name, total no of days, difficulty)

Package-Destination-3(**package-id, destination-id**)

Destination-3(**destination-id**, destination)