



## **Institute of Software Engineering**

Graduate Diploma in Software Engineering (GDSE)

GDSE67\_68

Database Management Systems

Take Home Assignment 03

Customer [PK—>CID]

<b>CID</b>	<b>Name</b>	<b>Address</b>	<b>Contact</b>	<b>Email</b>
C01	Nimal	No:20,Galle	0772266363	Nimal@yahoo.com
C02	Sasanka	No: 30,Galle	0736636636	Sas@yahoo.com
C03	Lakshman	No:39	0772737377	Laks@ijse.lk
C04	Mohan	No:90, Galle	0773664772	Mohan@ijse.lk

Project [PK—>PID]

<b>PID</b>	<b>CID</b>	<b>Estimated Cost</b>	<b>startDate</b>	<b>endDate</b>
P01	C01	60000000.00	2013-01-01	2014-01-01
P02	C01	45000000.00	2013-02-01	2014-04-20
P03	C02	36000000.00	2013-03-01	2014-01-20
P04	C03	23000000.00	2015-04-01	2015-04-02

Material [PK—>MID]

<b>MID</b>	<b>Name</b>	<b>sellingPrice</b>	<b>buyingPrice</b>	<b>qtyOnHand</b>	<b>packSize</b>
M01	Cement-mer	700.00	625.00	40	50kg
M02	Cement-mah	750.00	650.00	50	50kg
M03	Sand	2500.00	2350.00	25	Cube
M04	Coil	2400.00	2300.00	80	Rim

Project\_material\_detail [PK—>PID,MID] [FK —>PID,MID]

<b>PID</b>	<b>MID</b>	<b>Date</b>	<b>QTY</b>
P01	M01	2013-03-01	5
P01	M03	2013-03-03	1
P02	M01	2013-04-04	1

Write SQL queries to fulfill the following requirements (Data Control Language)

### Part I

1. Create a user called 'gdse67' and assign a password to 'gdse67' called ijse123.
2. Create a database called 'EXAM2014'.
3. Grant all the global privileges on 'gdse67' except 'ALTER'.
4. After you complete question 3 you must have reload privileges which you have assigned using FLUSH command.
5. Create a SQL DUMP (SQL backup) on the EXAM2014 database.

### Part II

1. Implement the above tables using SQL queries, you are required to set all the table constraints such as primary key, foreign key, integrity, null, not null, etc...
2. Insert the above records into each table.
3. Find all the customers who have been assigned projects.
4. How long will each project take to finish in days?
5. Find the customers who have spent more than 50000000.00 on their constructions.

6. Delete all customers who have not been involved with at least one project using a sub-query.
7. Increase the project's cost by 10% which was scheduled to be start in next year (2015).

### **Part III**

1. Find the total cost of the project for each customer.
2. Find the material cost of each project.
3. Find all customers who have exceeded 100 cement-mah packs for all their constructions.
4. Find the profit of each customer that the company received.
5. Create a view called 'Company Profit' for the question 4 query.