MILITARY INSTITUTE OF SCIENCE AND TECHNOLOGY
Department of Computer Science and Engineering
CSE 302: Database Management System Sessional, CSE 17
Practice Problem Set 01

Instructions:
1. Do not use **NATURAL JOIN** to solve any query.
2. **E-R diagram** is provided with the question conveying the structure of the database.

Help:
1. floor(Column_name) – to get the floor of column values.
2. Access current date from database using SYSDATE and it's in the format MM-DD-YYYY.

1.	Display the following information of **doctors** who have valid **Grameen** or **Banglalink** phone numbers and who are older than **30 years**.

Doctor Information
Medicine Dr. sabbir Rahman is 43 years old having contact number 01740917774
Gynecologist Dr. Marzuka Rasel is 37 years old having contact number 01792215789
Neurosurgeon Dr. Hakim Ahmed is 40 years old having contact number 01939455001
Pediatrics Dr. amena Begum is 38 years old having contact number 01720917646
Surgeon Dr. Wahab Siddique is 38 years old having contact number 01944026555
Neurosurgeon Dr. Faisal Rabbi is 34 years old having contact number 01760124936

2.	The hospital wants to research if there's any relation between the outcomes of operations and patient's physical health at that time. Help them out by providing them data for **successful** and **unsuccessful** operations in the format below. Show **BMI** with **two digit precision** after decimal point. BMI (Body Mass Index) is calculated as Weight/Height.

Unsuccessful:

Average Height	Average Weight	Average BMI
6.03	80	13.28

Successful:

Average Height	Average Weight	Average BMI
5.99	80	13.37

3.	Display the names of the **patients** with their **doctor names** from whom they got treatment and the **number of days** they stayed in the hospital. Display this information for the patients who remained admitted in the hospital for **more than 2 days**. Use "**Join On**" to join the required tables.

Patient Name	Doctor Name	Number of days stayed
Nasrin Ahmed	Sabbir Rahman	7
Ataul Islam	Zobaida Ali	3

Mithila Rayhan	Ratul Bishwash	5
Rajesh Rahman	Shaila Kader	5

4. A doctor gets **75%** of the **admission fees** of a patient admitted under his supervision and his **assistant doctor** gets **15%** of the **doctor's income** for assisting him. Show the name of the **supervising doctor**, name of **his assistant doctor**, **admission date**, total **admission fees**, **doctor's income** and **assistant doctor's income** for **April, 2018**.

Doctor	Assistant Doctor	Date of Admission	Total Fees	Doctor Fees	Assistant Doctor Fees
Zobaida Ali	Ratul Bishwash	04/20/2018	6000	4500	675
sabbir Rahman	Wahab Siddique	04/24/2018	24000	18000	2700
Marzuka Rasel	Hakim Ahmed	04/28/2018	9000	6750	1012.5
Hakim Ahmed	amena Begum	04/28/2018	12000	9000	1350
sabbir Rahman	Wahab Siddique	04/28/2018	12000	9000	1350
Hakim Ahmed	amena Begum	04/01/2018	3000	2250	337.5

5. Hospitals often need to accumulate very specific medical history of particular patients for research purpose.
As a database admin, provide them with the general health information of all **male** patients who had a **successful** operation under the care of doctors of **Neurology** department on exactly **29th March 2018**. The details should include patient's gender, blood group, blood sugar, height, weight and exact age on the day of the operation. Use "**Join Using**" to join the required tables.

Hint: Calculate age from operation date.

Patient Name	Operation Result	Gender	Blood Group	Blood Sugar	Height	Weight	Age
Rajesh Rahman	Successful	Male	B+	8.0 mmol/L	6.1	80	28
Saklain Monir	Successful	Male	O-	10.1 mmol/L	6.2	80	28
Ataul Islam	Successful	Male	O+	8.5 mmol/L	5.9	80	42