

Group A

Assignment No 5

- **Write a PL/SQL code block to calculate the area of a circle for a value of radius varying from 5 to 9. Store the radius and the corresponding values of calculated area in an empty table named areas, consisting of two columns, radius and area.**

```
mysql> create database calculation;  
Query OK, 1 row affected (0.01 sec)
```

```
mysql> use calculation;  
Database changed
```

```
mysql> create table areas(r numeric(2), area numeric(14,2));  
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> delimiter //  
mysql> create procedure proc_area()  
-> begin  
-> declare r numeric(2);  
-> declare area numeric(10,2);  
-> declare pi numeric(4,2);  
-> set pi = 3.14;  
-> set r = 5;  
-> l1  
-> :  
-> while r<=9 do  
-> set area = pi * power(r,2);  
-> insert into areas values(r,area);  
-> set r = r + 1;  
-> end  
-> while l1;  
-> end  
-> //
```

```
Query OK, 0 rows affected (0.01 sec)  
mysql> delimiter ;  
mysql> call proc_area();  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> select * from areas;
```

```
+-----+-----+
```

```
| r | area |
```

```
+-----+-----+
```

```
| 5 | 78.50 |
```

```
| 6 | 113.04 |
```

```
| 7 | 153.86 |
```

```
| 8 | 200.96 |
```

```
| 9 | 254.34 |
```

```
+-----+-----+
```

```
5 rows in set (0.01 sec)
```

Conclusion: Successfully implemented the PL/SQL code block to calculate the area of a circle for a value of radius varying from 5 to 9.

Date:	
Marks obtained:	
Sign of course coordinator:	
Name of course Coordinator:	