

## SAMARTH ZADBUKE

1. Select from any table a number and determine whether it is within a given range (for example, between 1 and 10).

```
W2_SAMARTHZADBUKE_87083>CREATE PROCEDURE checks()BEGIN  DECLARE lower_bound INT DEFAULT 1;  DECLARE upper_bound INT
DEFAULT 10;  DECLARE n INT;  SELECT length INTO n FROM rectangle;  CASE  WHEN n BETWEEN lower_bound AND up
er_bound THEN  SELECT CONCAT(n, ' is within the range ', lower_bound, ' and ', upper_bound);  ELSE
SELECT CONCAT(n, ' is NOT within the range ', lower_bound, ' and ', upper_bound);  END CASE;END; //
Query OK, 0 rows affected (0.03 sec)

W2_SAMARTHZADBUKE_87083>call checks()//
+-----+
| CONCAT(n, ' is within the range ', lower_bound, ' and ', upper_bound) |
+-----+
| 1 is within the range 1 and 10 |
+-----+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.02 sec)

W2_SAMARTHZADBUKE_87083>
```

- 2.Select from any table three positive integers representing the sides of a triangle, and determine whether they form a valid triangle

```
W2_SAMARTHZADBUKE_87083>select * from rectangle//
+-----+-----+-----+-----+
| length | width | area | perimeter |
+-----+-----+-----+-----+
|      1 |     2 |    2 |          6 |
+-----+-----+-----+-----+
1 row in set (0.00 sec)

W2_SAMARTHZADBUKE_87083>create procedure Tra() begin declare l1 int(4); declare l2 int(4); declare l3 int(4); select l
length, width,area into l1,l2,l3 from rectangle; case when l1+l2>l3 then select concat(l1,l2,l3, "is form valid triangle"
); else select concat(l1,l2,l3,"is not form valid triangle"); end case; end;//
Query OK, 0 rows affected, 3 warnings (0.01 sec)

W2_SAMARTHZADBUKE_87083>call Tra()//
+-----+
| concat(l1,l2,l3, "is form valid triangle") |
+-----+
| 122is form valid triangle |
+-----+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

W2_SAMARTHZADBUKE_87083>
```

**3 Check if a given a year is a leap year. The condition is:- year should be (divisible by 4 and not divisible by 100) or (divisible by 4 and divisible by 400.). The year should be Selected from some table.**

```
W2_SAMARTHZADBUKE_87083>CREATE PROCEDURE check_leap_year() BEGIN DECLARE y INT; SELECT year INTO y FROM year LIMIT 1; CASE WHEN (y % 4 = 0 AND y % 100 != 0) OR (y % 400 = 0) THEN select CONCAT(y, ' is a leap year') ELSE select CONCAT(y, ' is not a leap year'); end case; END;//
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'ELSE select CONCAT(y, ' is not a leap year'); end case; END' at line 1
W2_SAMARTHZADBUKE_87083>^C
W2_SAMARTHZADBUKE_87083>CREATE PROCEDURE check_leap_year() BEGIN DECLARE y INT(4) ; SELECT year INTO y FROM year LIMIT 1; CASE WHEN (y % 4 = 0 AND y % 100 != 0) OR (y % 400 = 0) THEN select CONCAT(y, ' is a leap year'); ELSE select CONCAT(y, ' is not a leap year'); end case; END;//
Query OK, 0 rows affected, 1 warning (0.01 sec)

W2_SAMARTHZADBUKE_87083>call check_leap_year();//
+-----+
| CONCAT(y, ' is not a leap year') |
+-----+
| 2002 is not a leap year          |
+-----+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)
```