

EXPERIMENT NO: - 10

To understand the concepts of stored Functions.

```
use RMS_2; select database ();  
select * from Passenger;
```

Use of Stored function

```
delimiter $$  
create function agelevel(p_agelimit double)  
returns varchar(10)  
deterministic  
begin  
declare lvl varchar(10)  
if p_agelimit>30 then set lvl='TYPE1'  
elseif  
(p_agelimit <=30 and p_agelimit>=25)  
then set lvl='TYPE2';  
elseif p_agelimit<25  
then set lvl='TYPE3';  
end if;  
return(lvl);  
end  
$$  
delimiter; select *from passenger;  
select P_Name, agelevel(Age) from Passenger;
```

Even - odd

Display 0 for EVEN and 1 for ODD delimiter

```
$$  
create function isodd(input_number int)  
returns int  
deterministic  
begin  
declare v_isodd int;  
if mod(input_number,2)=0 then set v_isodd=FALSE;  
# 0 - Even, 1 - Odd  
else
```

```

set v_isodd=TRUE;
end if;
return(v_isodd);
end $$
delimiter ;
select * from Passenger; select P_name,isodd(P_ID) from Passenger; select
P_name,isodd(PNR) from Passenger;select P_name,isodd(Age) from Passenger;
select P_name,isodd(Ticket_ID) from Passenger;

```

#Output: -

Enter password: ****

Welcome to the MySQL monitor. Commands end with ;

or \g. Your MySQL connection id is 34 Server version: 8.0.27 MySQL Community Server - GPL Copyright (c) 2000, 2021, Oracle and/or its affiliates.

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement. mysql> use

RMS_2; Database changed mysql> select database();

```

+-----+
| database() |
+-----+
| rms_2 |
+-----+

```

1 row in set (0.00 sec)

mysql> select * from Passenger;

```

+-----+ +-----+ +-----+ +-----+ +-----+ +-----+
| P_ID | P_name | Age | Gender | Ticket_ID | PNR |
+-----+ +-----+ +-----+ +-----+ +-----+ +-----+
| 201 | Barry | 21 | Male | 596 | 308123905 |
| 217 | Mark | 24 | Male | 136 | 1265577771 |
| 239 | Alice | 30 | Female | 245 | 1975364587 |

```

```
| 340 | Natasha | 32 | Female | 169 | 2110755678 |
| 367 | Tony | 24 | Male | 101 | 2120017791 |
+.....+.....+.....+.....+.....+.....+5 rows in set (0.00 sec)
```

```
mysql> create function agelevel(p_agelimit double)
```

```
-> returns varchar(10)
```

```
-> deterministic
```

```
-> begin
```

```
-> declare lvl varchar(10);
```

```
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 " at line
5 mysql> delimiter $$
```

```
mysql> create function agelevel(p_agelimit double)
```

```
-> returns varchar(10)
```

```
-> deterministic
```

```
-> begin
```

```
-> declare lvl varchar(10);
```

```
-> if p_agelimit>30
```

```
-> then set lvl='TYPE1';
```

```
-> elseif(p_agelimit <=30 and p_agelimit>=25)
```

```
-> then set lvl='TYPE2';
```

```
-> elseif p_agelimit<25
```

```
-> then set lvl='TYPE3';
```

```
-> end if;
```

```
-> return(lvl);
```

```
-> end $$
```

```
Query OK, 0 rows affected (0.04 sec)
```

```
mysql> delimiter ;
```

```
mysql> select * from passenger;
```

```
.....+.....+.....+.....+
| P_ID | P_name | Age | Gender | Ticket_ID | PNR |
.....+.....+.....+.....+
| 201 | Barry | 21 | Male | 596 | 308123905 |
| 217 | Mark | 24 | Male | 136 | 1265577771 |
| 239 | Alice | 30 | Female | 245 | 1975364587 |
```

340	Natasha	32	Female	169	2110755678
367	Tony	24	Male	101	2120017791

5 rows in set (0.01 sec)

```
mysql> select P_Name, agelevel(Age) from Passenger;
```

P_Name	agelevel(Age)
Barry	TYPE3
Mark	TYPE3
Alice	TYPE2
Natasha	TYPE1
Tony	TYPE3

5 rows in set (0.00 sec)

```
mysql> delimiter $$ mysql> create function isodd(input_number int)
-> returns int
-> deterministic
-> begin
-> declare v_isodd int;
-> if mod(input_number,2)=0 then
-> set v_isodd=FALSE; # 0 - Even, 1 - Odd
-> else
-> set v_isodd=TRUE;
-> end if;
-> return(v_isodd);
-> end $$
Query OK, 0 rows affected (0.03 sec)
```

```
mysql> delimiter ;
mysql> select * from Passenger;
```

P_ID	P_name	Age	Gender	Ticket_ID	PNR
201	Barry	21	Male	596	308123905
217	Mark	24	Male	136	1265577771
239	Alice	30	Female	245	1975364587
340	Natasha	32	Female	169	2110755678
367	Tony	24	Male	101	2120017791

5 rows in set (0.00 sec)

```
mysql> select P_name, isodd(P_ID) from Passenger;
```

P_name	isodd(P_ID)
--------	-------------

P_name	isodd(PNR)
Barry	1
Mark	1
Alice	1
Natasha	0
Tony	1

5 rows in set (0.00 sec)

```
mysql> select P_name,isodd(PNR) from Passenger;
```

P_name	isodd(PNR)
Barry	1
Mark	1
Alice	1
Natasha	0
Tony	1

5 rows in set (0.00 sec)

```
mysql> select P_name,isodd(Age) from Passenger;
```

P_name	isodd(Age)
Barry	1
Mark	0
Alice	0
Natasha	0
Tony	0

5 rows in set (0.00 sec)

```
mysql> select P_name,isodd(Ticket_ID) from Passenger;
```

P_name	isodd(Ticket_ID)
Barry	0
Mark	0
Alice	1
Natasha	1
Tony	1

```
+
+
*****
*****
+
5 rows in set (0.00 sec)mysql>
```