

Ex:No: 11

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Simple programming exercise using(CASE and LOOP)

Program 1:

Write a function that uses CASE statement where if monthly_value is equal to or less than 4000, then income_level will be set to 'Low Income'. If monthly_value is equal to or less than 5000, then income_level will be set to 'Avg Income'. Otherwise, income_level will be set to 'High Income'.

```
mysql> delimiter //
mysql> create function incomelevel(monthly_value int) returns varchar(20)
-> deterministic
-> begin
-> declare income_level varchar(20);
-> case monthly_value
-> when 4000 then
-> set income_level='Low Income';
-> when 5000 then
-> set income_level='Average Income';
-> else
-> set income_level='High Income';
-> end case;
-> return income_level;
-> end; //
Query OK, 0 rows affected (0.01 sec)

mysql> select incomelevel(5300); //
+-----+
| incomelevel(5300) |
+-----+
| High Income       |
+-----+
1 row in set (0.00 sec)
```

Program 2:

Write a function that will use ITERATE statement which would cause the loop to repeat while income is less than 4000. Once income is greater than or equal to 4000, would terminate the LOOP.

```
mysql> create function calcincome(starting_value int) returns int
-> deterministic
-> begin
-> declare income int;
-> set income=0;
-> label1: loop
-> set income=income+starting_value;
-> if income<4000 then
-> iterate label1;
-> end if;
-> leave label1;
-> end loop label1;
-> return income;
-> end; //
```

Query OK, 0 rows affected (0.01 sec)

```
mysql> select calcincome(2100);
-> //
```

```
+-----+
| calcincome(2100) |
+-----+
|           4200 |
+-----+
```

1 row in set (0.00 sec)