

1)

```
mysql> CREATE FUNCTION INCOMELEVEL(MONTHLY_VALUE INT) RETURNS VARCHAR(20) BEGIN
DECLARE INCOME_LEVEL VARCHAR(20); CASE MONTHLY_VALUE WHEN 4000 THEN SET INCOME_L
EVEL='LOW INCOME'; WHEN 5000 THEN SET INCOME_LEVEL='AVG INCOME'; ELSE SET INCOME
_LEVEL='HIGH INCOME'; RETURN INCOME_LEVEL; 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 '' at line 1

```
mysql> DELIMITER //
```

```
mysql>
```

```
mysql> CREATE FUNCTION IncomeLevel ( monthly_value INT )
-> RETURNS varchar(20)
->
-> BEGIN
->
->   DECLARE income_level varchar(20);
->
->   CASE monthly_value
->     WHEN 4000 THEN
->       SET income_level = 'Low Income';
->
->     WHEN 5000 THEN
->       SET income_level = 'Avg 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)

```
mysql>
```

2)

```
mysql> SELECT INCOMELEVEL2(2100);
-> //
ERROR 1054 (42S22): Unknown column 'starting_value' in 'field list'
mysql> SELECT IncomeLevel2(2100);
-> //
ERROR 1054 (42S22): Unknown column 'starting_value' in 'field list'
mysql> DROP FUNCTION INCOMELEVEL2 //
Query OK, 0 rows affected (0.00 sec)

mysql> CREATE FUNCTION CALCINCOME2 ( starting_value INT )
-> RETURNS INT
->
-> 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 (0.00 sec)

mysql> SELECT CALCINCOME2(2100);
-> //
+-----+
| CALCINCOME2(2100) |
+-----+
|                4200 |
+-----+
1 row in set (0.00 sec)

mysql> 
```