Project 2

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Codes are following:

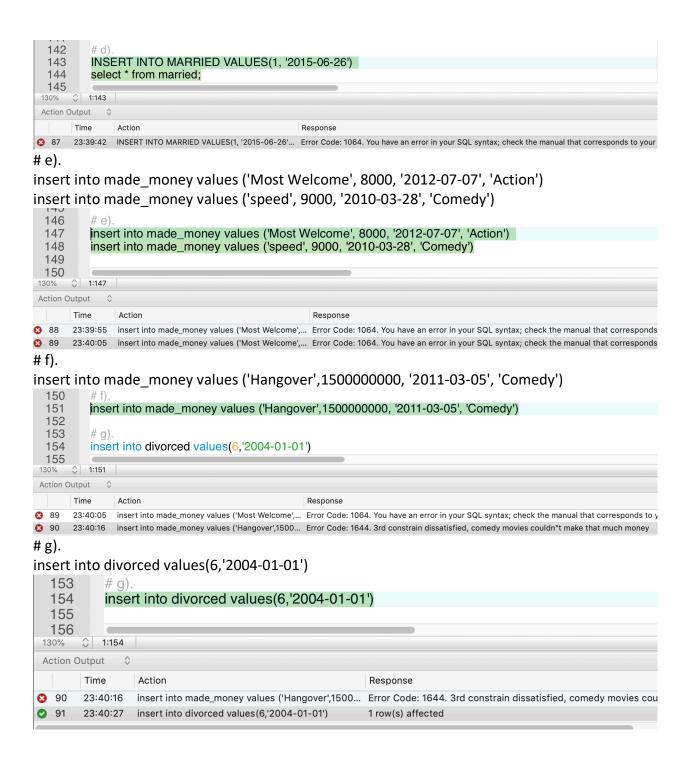
```
# Question 1
delimiter $$
drop trigger if exists movie type constrain $$
create trigger movie_type_constrain
before insert on made money
for each row
begin
if new.Category = null or
(new.Category!='Romantic' and new.Category!='Comedy' and new.Category!='Drama' and
new.Category!='Action') then
set new.Category='Action';
end if;
end $$
# Question 2
delimiter $$
drop trigger if exists star_constrain $$
create trigger star constrain
before insert on appeared in
for each row
begin
if not exists
select *
from made_money a, appeared_in b
where b.star=new.star and a.movie= b.movie and
(select day_opened from made_money where movie=new.movie) > a.day_opened and
a.category in ('Romantic', 'Drama', 'Comedy')
)
then
```

```
update made_money as c
set c.category='Drama'
where c.movie=new.movie;
end if;
end $$
# Question 3
delimiter $$
drop trigger if exists married_constrain $$
create trigger married_constrain
after insert on married
for each row
begin
if
# could we use with in trigger?
exists(select star from (
select * from in_couple
join married
group by star
having married.couple_num = new.couple_num and count(star) > 1) as a
where (a.star not in
(select star from divorced
join in_couple
group by star)))
then
# there an error detected.
signal sqlstate '45000' set message_text = "A star cannot be married to multiple stars
simultaneously.";
end if;
end $$
```

Question 4

```
delimiter $$
drop trigger if exists expense constraint $$
create trigger expense_constraint
before insert on made money
for each row follows movie type constrain
begin
# put constrain below
# 1st, general
if (new.how much <= 1000 or new.how much >= 3000000000)
then
signal sqlstate '45000'
set message text = '1st constrain dissatisfied. Value out of money range';
# 2nd, on action movie
elseif (new.category='Action' and new.how_much <= 10000)
then
signal sqlstate '45000'
set message text = '2nd constrain dissatisfied, action movies should make at least 10000
dollars';
elseif(new.category='Comedy' and new.how_much >= 1000000000) then
signal sqlstate '45000'
set message_text = '3rd constrain dissatisfied, comedy movies couldn"t make that much
money';
end if;
end $$
# Question 5
delimiter $$
drop trigger if exists divorce_constraint $$
create trigger divorce constraint
before insert on divorced
for each row
begin
  if
```

```
# larger
       (new.day < (select t1.day from married t1 where t1.couple num = new.couple num
limit 1))
  then
  # set to equal
       set new.day = (select t2.day from married t2 where t2.couple_num = new.couple_num);
end if;
end $$
# a).
INSERT into made money
VALUES ('IRON MAN',10000000,'2008-05-02','ACTION');
             INSERT into made_money
   133 •
              VALUES ('IRON MAN', 10000000, '2008-05-02', 'ACTION');
   134
   135
   136
 130%
         1:133
 Action Output
         Time
                    Action
                                                                   Response
                    INSERT into made_money VALUES ('IRON MAN',... 1 row(s) affected
2 84
         23:38:12
# b).
UPDATE made money SET category='Horror' WHERE movie='Fight Club'
  136
  137
          UPDATE made_money SET category='Horror' WHERE movie='Fight Club'
  138
      65:137
 Action Output
               Action
       Time
                                                 Response
       23:39:20 UPDATE made_money SET category='Horror' W... 1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
# c).
INSERT INTO APPEARED IN VALUES ('Matt Damon', 'Bruce Almighty')
  139
           INSERT INTO APPEARED IN VALUES('Matt Damon', 'Bruce Almighty')
  140
  141
 130%
       62:140
 Action Output $
                Action
       Time
                                                     Response
       23:39:32 INSERT INTO APPEARED_IN VALUES ('Matt Dam... 1 row(s) affected
INSERT INTO MARRIED VALUES(1, '2015-06-26')
select * from married;
```



Extra

delimiter \$\$

drop trigger if exists EXTRA \$\$

create trigger EXTRA

before insert on made_money

for each row follows expense_constraint

begin

insert into log_data values(new.movie,new.category);
end \$\$

Show that

select * from log_data

If we do extra trigger after implementing 5 triggers first, then the log_data would still be null.



But if start from initial again, then the answer would be:

