

Answers to Trigger Problem Statements

1) Create before insert trigger to increase salary of instructors by 10 dollars

```
create trigger before_trigger_example
before insert
on instructor
for each row
set new.salary = new.salary + 10;

insert into instructor (ID, name, dept_name, salary)
values (101, 'John', 'Comp. Sci.', 200000);

select * from instructor
where name = 'John';
```

2) Create after trigger to add id and salary of employees into a new table after insert

```
drop table id_and_salary;

create table id_and_salary (
id_of_instructor int,
salary_of_instructor int);

describe id_and_salary;

drop trigger before_trigger_example;

create trigger after_trigger_example
after insert
on instructor
for each row
insert into id_and_salary values (new.ID, new.salary);

insert into instructor (ID, name, dept_name, salary)
values (102, 'Jim', 'Comp. Sci.', 300000);

select * from id_and_salary;

select * from instructor
where ID = 102;
```

3) Create a trigger which will convert all letters of instructor names to upper case before updating the table

```
create trigger conv_ins_name_to_uppercase
before update
on instructor
for each row
set new.name = upper(new.name);
```

```
select * from instructor;
```

```
select *
from instructor
where name = 'Jim';
```

```
update instructor
set name = 'Jazz'
where name = 'Jim';
```

```
select *
from instructor
where name like 'J%';
```

4) Create a trigger which will create a new table to add id and names of instructors after increasing salary of all instructors whose name starts with A

```
drop table id_name_of_ins;
```

```
create table id_name_of_ins (
name_of_ins varchar(30),
sal_of_ins int);
```

```
select name, salary
from instructor
where name like 'A%';
```

```
create trigger after_update_trigger
after update
on instructor
for each row
insert into id_name_of_ins values (new.name, new.salary);
```

```
update instructor
set salary = salary + 100
```

where name like 'A%';

select * from id_name_of_ins;

truncate table id_name_of_ins;

drop trigger after_update_trigger;

5) Create trigger which will store all the data of instructors which we will delete, instructors to be deleted must have 'i' as 2nd and 'e' as 3rd letter in their name.

describe instructor;

```
create table deleted_data_of_ins (  
  ins_id varchar(5) primary key,  
  i_name varchar(20),  
  ins_dept varchar(20),  
  i_sal int);
```

describe deleted_data_of_ins;

DELIMITER \$\$

```
CREATE TRIGGER before_data_ofins_delete  
BEFORE DELETE  
ON instructor  
FOR EACH ROW  
BEGIN  
  INSERT INTO deleted_data_of_ins(ins_id, i_name, ins_dept, i_sal)  
  VALUES(OLD.ID, OLD.name, OLD.dept_name, OLD.salary);  
END$$
```

DELIMITER ;

```
select name  
from instructor  
where name like '_ie%';
```

```
delete from instructor  
where name like '_ie%';
```

```
select * from deleted_data_of_ins;
```