```
1    /* Question 2.8 */
2    /* Triggers are not called in any of the java code and has written at backend */
3
4    /* This Trigger is Implemented if any student is enrolled into new class*/
5    /*Which check if the table is enrollments and query given is insert statement */
6    /* It also inserts the record in the log table */
7
8    create or replace trigger enrollments_trigger_insert
9    after insert on enrollments
10   for each row
11   declare
12   user_name varchar2(12);
13   table_from varchar2(12) default 'enrollments';
14   query varchar2(12) default 'insert';
15   log_key_value varchar2(14);
16   log_b# char(4);
17   log_classid char(5);
18   log_concat varchar2(30);
19   begin
20   log_b# := :new.b#;
21   log_classid := :new.classid;
22   log_concat := (log_b#||','||log_classid);
23   update classes set class_size=class_size+1 where classid=log_classid;
24   select user into user_name from dual;
25   log_key_value:=log_sequence.nextval;
26    insert into logs values(log_key_value,user_name,sysdate,table_from,query,log_concat);
27    end;
28   /
29
30   /* This Trigger is Implemented if any student dropped a class*/
31   /*Which check if the table is enrollments and query given is delete statement */
32   /* It also inserts the record in the log table */
33   create or replace trigger enrollments_trigger_delete
34   after delete on enrollments
35   for each row
36   declare
37   user_name varchar2(12);
38   table_from varchar2(12) default 'enrollments';
39   query varchar2(12) default 'delete';
40   log_key_value varchar2(14);
41   log_b# char(4);
42   log_classid char(5);
43   log_concat varchar2(30);
44
45   begin
46   log_b# := :old.b#;
47   log_classid:= :old.classid;
48   log_concat := (log_b#||','||log_classid);
49
50   update classes set class_size=class_size-1 where classid=log_classid;
51   select user into user_name from dual;
52   log_key_value:=log_sequence.nextval;
53    insert into logs values(log_key_value,user_name,sysdate,table_from,query,log_concat);
54    end;
55   /
56
57   /* This Trigger is Implemented if any student deleted */
58   /*Which check if the table is students and query given is delete statement */
59   /* It also inserts the record in the log table */
60   create or replace trigger delete_student_trigger
61   after delete on students
62   for each row
63   declare
64   user_name varchar2(12);
65   table_from varchar2(12) default 'students';
66   query varchar2(12) default 'delete';
67   log_key_value varchar2(14);
68   log_b# char(4);
69   begin
```

```
70    log_b# := :old.b#;
71    delete from enrollments where b#=log_b#;
72    select user into user_name from dual;
73    log_key_value:=log_sequence.nextval;
74      insert into logs values(log_key_value,user_name,sysdate,table_from,query,log_b#);
75
76
77      end;
78    /
79    show errors
```