```
rem Harshini S-185001058
SQL> -- 1. The date of arrival should be always later than or on the same date of departure.
SQL> create or replace trigger lag_date
  2  before insert on fl_schedule for each row
  3  when(new.departs>new.arrives)
  4  BEGIN
  5  raise_application_error(-20000,'Error:Departs after arrival!');
  6  END;
  7  /

Trigger created.

SQL> INSERT INTO fl_schedule VALUES
('9W-3851','12-apr-2005',0710,'11-apr-2005',0800,120.40);
INSERT INTO fl_schedule VALUES ('9W-3851','12-apr-2005',0710,'11-apr-2005',0800,120.40)
          *
ERROR at line 1:
ORA-20000: Error:Departs after arrival!
ORA-06512: at "SYSTEM.LAG_DATE", line 2
ORA-04088: error during execution of trigger 'SYSTEM.LAG_DATE'


SQL> INSERT INTO fl_schedule VALUES
('9E-3851','11-apr-2005',0710,'12-apr-2005',0800,120.40);

1 row created.

SQL> -- 2. Flight number CX-7520 is scheduled only on Tuesday, Friday and Sunday.
SQL> create or replace trigger day_spec
  2  before insert on fl_schedule for each row
  3  DECLARE
  4  d date;
  5  BEGIN
  6  d:=:new.departs;
  7  dbms_output.put_line(to_char(d,'D'));
  8  if(substr(to_char(d,'Day'),1,3) not in ('Tue') and substr(to_char(d,'Day'),1,3) not in ('Fri') and
  9  substr(to_char(d,'Day'),1,3) not in ('Sun') and :new.flno='CX-7520') then
 10  raise_application_error(-20343,'Error:Scheduled on invalid days!');
 11  end if;
 12  END;
 13  /

Trigger created.
```

```
SQL> rem insertin of CX-7520 scheduled on friday.
SQL> INSERT INTO fl_schedule VALUES
('CX-7520','15-apr-2005',0730,'16-apr-2005',0840,225.43);

1 row created.

SQL> rem insertin of CX-7520 scheduled on thursday.
SQL> INSERT INTO fl_schedule VALUES
('CX-7520','14-apr-2005',0730,'16-apr-2005',0840,225.43);
INSERT INTO fl_schedule VALUES ('CX-7520','14-apr-2005',0730,'16-apr-2005',0840,225.43)
        *
ERROR at line 1:
ORA-20343: Error:Scheduled on invalid days!
ORA-06512: at "SYSTEM.DAY_SPEC", line 8
ORA-04088: error during execution of trigger 'SYSTEM.DAY_SPEC'


SQL> -- 3. An aircraft is assigned to a flight only if its cruising range is more than the distance of
the
SQL> -- flights' route.
SQL> create or replace trigger assign_fl
  2  before insert on flights for each row
  3  DECLARE
  4  d routes.distance%type;
  5  cr aircraft.cruisingrange%type;
  6  BEGIN
  7  select routes.distance into d from routes where routes.routeid=:new.rid;
  8  select cruisingrange into cr from aircraft where aid=:new.aid;
  9  if(cr<d) then
 10  raise_application_error(-20350,'Error:Invalid assignment!');
 11  end if;
 12  END;
 13  /

Trigger created.

SQL> rem cruising range of 7(520) is lesser than LW100(2308)
SQL> INSERT INTO flights VALUES ('9W-3749','LW100',7);
INSERT INTO flights VALUES ('9W-3749','LW100',7)
        *
ERROR at line 1:
ORA-20350: Error:Invalid assignment!
```

ORA-06512: at "SYSTEM.ASSIGN_FL", line 8
ORA-04088: error during execution of trigger 'SYSTEM.ASSIGN_FL'

SQL> rem cruising range of 1(8430) is lesser than LW100(2308)
SQL> INSERT INTO flights VALUES ('9W-3749','LW100',1);

1 row created.

SQL> spool off;