PRACTICAL TEST II

1. The following relations keep track of airline flight information:

Flights (*flno:* **integer**, *from:* **string**, *to:* **string**, *distance:* **integer**, *departs:*

**time**, *arrives:* **time**, *price:* **integer**)

Aircraft (*aid:* **integer**, *aname:* **string**, *cruisingrange:* **integer**)

Certified(eid: **integer**, aid: **integer**)

Employees(*eid:* **integer**, *ename:* **string**, *salary:* **integer**)

Note that the Employees relation describes pilots and other kinds of employees as well; every pilot is certified for some aircraft, and only pilots are certified to fly. Write each of the following queries as views in SQL to:

* 1. Find the names of aircraft such that all pilots certified to operate them earn more than 80,000.
  2. For each pilot who is certified for more than three aircraft, find the *eid* and the maximum *cruisingrange* of the aircraft for which she or he is certified.
  3. Show the names of pilots whose *salary* is less than the price of the cheapest route from Los Angeles to Honolulu.
  4. For all aircraft with *cruisingrange* over 1000 miles, show the name of the aircraft and the average salary of all pilots certified for this aircraft.
  5. Shows the *aids* of all aircraft that can be used on routes from Los Angeles to Chicago.
  6. Identify the routes that can be piloted by every pilot who makes more than

$100,000.

* 1. Print the *enames* of pilots who can operate planes with *cruisingrange* greater than 3000 miles but are not certified on any Boeing aircraft.
  2. Compute the difference between the average salary of a pilot and the average salary of all employees (including pilots).
  3. show the name and salary of every nonpilot whose salary is more than the average salary for pilots.

*Note: Add your own data to verify that your queries work*