Solutions to practice problems: SQL single table queries

To reference the tables of that database add prefix htopi. to the name of each table. For example, to reference the customer table you should use htopi.customer_s.

1 Basics

1. Select cust_name, cust_phone
   from htopi.customer_s
   where cust_phone like '(617)\%';

2. Display all distinct values of product line color codes.

   Select distinct prodline_color_code
   from htopi.prodline_s

3. Select vendor_name, vendor_street_address, vendor_city, vendor_zip, vendor_annual_sales
   from htopi.vendor_s
   where vendor_annual_sales >= 10000 and vendor_annual_sales <= 20000
   order by vendor_name;

4. Select dept_name, dept_phone
   from htopi.dept_s
   where dept_building != 'H' and dept_building != 'G' and dept_building != 'B'
   order by dept_building;
   or

   Select dept_name, dept_phone
   from htopi.dept_s
   where dept_building not in('H', 'G', 'B')
   order by dept_building;

2 Grouping and group statistics

1. Select emp_dept, count(*)
   from htopi.employee_s
   group by emp_dept;

2. Select prod_prodline, avg(prod_cost), sum(prod_cost), min(prod_cost), max(prod_cost)
   from htopi.product_s
   group by prod_prodline
   order by sum(prod_cost) desc;

3. Select prod_prodline, count(*), avg(prod_cost), sum(prod_cost)
   from htopi.product_s
   group by prod_prodline
having sum(prod_price) > 2000 and count(*) <= 5
order by prod_prodline;

3 Nested subqueries (noncorrelated).

1. Select emp_lname, emp_fname, emp_dept, emp_nbr_of_dependents
   from htopi.employee_s
   where emp_dept in (4, 7, 8) and
   emp_nbr_of_dependents > (select ave (emp_nbr_of_dependents)
   from htopi.employee_s );