**Quiz#3**

#1: SQL> run

SELECT name, stadr, city, DECODE(state,'MA', yrgoal\*2,

'RI', yrgoal\*3,

yrgoal\*4) altered\_goal yrgoal

from donor;

**Explanation:**

Decode command in this query will show the updated yrgoal in column altered\_goal.

If state is MA yrgoal is multiplied by 2,

If state is RI yrgoal is multiplied by 3 or with any other state yrgoal is multiplied by 4.

#2 Select state, count(contact), sum(yrgoal)

from donor

group by state;

ST COUNT(CONTACT) SUM(YRGOAL)

MA 4 700

RI 2 400

**Explanation:**

The data is first grouped by states and then it will count the no. of contacts in that state and sum of the yrgoal of every contact in that state because we have grouped it by state.

#3: Select itemclass, sum(price), avg(price)

from inven

where onorder > 0

group by itemclass;

ITEMCLASS SUM(PRICE) AVG(PRICE)

BY 12.99 12.99/1

CH 90.92 (90.92)/3

BK 17.99 17.99/1

**Explanation**

**WHERE** clause in this query first eliminated all the records with **ONORDER** less than or equal to zero. **GROUPBY** has itemclass so all the records are grouped by **itemclass a**nd sum and avg price within each itemclass is displayed.

#4: Select dept, sum(cost)

from inven

group by dept

having sum(cost) > 30;

DEPT SUM(COST)

TY 108

SP 39

**Explanation:**

In this query the rows were first grouped by DEPT and the sum of cost within each DEPT is calculated. We have one HAVING clause after GROUPBY clause which eliminated the DEPT with sum(cost) < 30.

#5: Select dept, sum(onhand), sum(onorder)

from inven

where cost > 10

group by dept

having sum(onhand) > 25

order by sum(onhand);

DEPT SUM(ONHAND) SUM(ONORDER)

SP 36 25

BK 30 30

**Explanation:**

In this query all the records with cost < 10 are eliminated first. Rows are then grouped by DEPT. Dept **TY** is eliminated from the result because we want the records with sum(onhand) > 25 and result is then displayed in order of sum(onhand) ascending.

**Problem #6:** Use the tables above and write a query that would show all of the orders and all of the line items within the order. On the line you should also show the name of the item and the name of the customer.

Select oz.ORDERNO, inc.CUSTNAME, ol.ITEMNO, inv.ITEMNAME

from Orderz oz, Orderline ol, invent inv, invcust inc

**WHERE** oz.ORDERNO = ol.ORDERNO and ol.ITEMNO = inv.ITEMNO

and oz.CUSTID = inc.CUSTID **ORDERBY** oz.ORDERNO;