## **Database Systems**

## **Laboratory Worksheet 1**

## Y3S2.SE.WE.02.01

```
01)
 a) create table client (
     clno: char(7),
     name: varcher (12),
     address: varchar (30),
     constraint client pk PRIMARY KEY (clno)
)
b) create table stock (
     company: char(7),
     price: number(6,2),
     dividend: number(4,2),
     eps: number(4,2),
     constraint stock pk PRIMARY KEY (company)
 )
 c) create table trading (
    company: char(7),
    exchange: varchar(12),
    constraint trading pk PRIMARY KEY (company, exchange),
    constraint trading exchange fk FORINGN KEY (company)
REFERENCES stock
 )
 d) create table purchase (
    clno: char(3),
```

```
company : char(7),
    pdate: date,
    qty: number (6),
    price: number (6,2),
    constraint purchase pk PRIMARY KEY (clno, company, pdate,
    constraint purchase company fk FORINGN KEY(clno))
                                                 REFERENCES client,
    constraint purchase company fk2 FORINGN KEY(company)
                                                 REFERENCES stock
)
      Insert into client values ('200', 'John Smith', '3 East Av Bentley WA
02)
   6102');
  Insert into client values ('201', 'Jill Brody', '42 Bent St Perth WA 6001');
   Insert into stock values ('BHP', 10.50, 1.50, 3.20);
   Insert into trading values ('BHP', 'Sydney');
   Insert into purchase values('100', 'BHP', '02-OCT-2001', 1000, 12.00');
03)
 a). select distinct c.name, p.company, s.price, s. dividend, s.eps
    from client c ,purchase p , stock s
    where c.clno = p.clno and p.company = s.company
b) select c.name, p.company, sum(qty),
    (sum [qty * price]/sum [qty]) as "Average Price"
    From client c, purchase p
    Where c.clno = p.clno GROUP BY c.name, p.company;
      OR
```

Select c.name, p.company, sum(p.qty) total\_qty, Sum(p.qty\* p.price)/sum(p.qty) App
From client c, purchase p
Where c.clno = p.clno
group by c.name, p.company

- c) select c.name , p.company , sum(p.qty) total\_qty, sum( p.qty \* s.price) current\_value from client c , purchase p , stock s , trading t where c.clno = p.clno and p.company = s.company and s.company = t.company and t.exchange = "New York" group by c.name , p.company
- e) sum (p.qty \* )s.price p.price )) book\_pro