SQLITE Day 3 Codes

Guidelines:

- Red color coding Query
- Blue color coding Query Output

Loading the Database and setting output formatting

```
sqlite>.open ProductDB.db
sqlite> .tables
parle_prod product_info
sqlite> .mode column
sqlite> .header on
sqlite>
sqlite> select * from parle_prod;
prod_name sum(prod_price)
PARLEg-Coconut 35
Parle-G
         5
ParleG-Coconut 140
ParleG-Doubledip 23
ParleG-Pista 45
sqlite> select * from product_info;
prod_id prod_name      prod_price
101 Parle-G 5
102 GoodDay 10
103 KrackJack
                10
104
    Sunfeast
                15
105 Marie-Lite 20
106 Nutri-Choice 35
107 Hide-N-Seek 49
```

```
Choco-Chips 70
110
111
      ParleG-Coconut 35
112
      ParleG-Pista
113
     ParleG-Doubledip 23
114
     PARLEg-Coconut 35
115
      ParleG-Coconut 105
116
     Sunfeast
                  122
                         Joins (Inner, Left, Cross, Self and Full Outer)
sqlite>
sqlite> select * from product_info inner join parle_prod on parle_prod.prod_name =
product_info.prod_name;
prod_id prod_name
                      prod_price prod_name
                                                sum(prod_price)
101
      Parle-G
                  5
                        Parle-G
                                    5
      ParleG-Coconut 35
                             ParleG-Coconut 140
111
                           ParleG-Pista
112
      ParleG-Pista
                   45
                                         45
113
      ParleG-Doubledip 23
                              ParleG-Doubledip 23
114
      PARLEg-Coconut 35
                             PARLEg-Coconut 35
115
      ParleG-Coconut 105
                             ParleG-Coconut 140
sqlite>
sqlite> select * from product_info inner join parle_prod on parle_prod.prod_name =
product_info.prod_id;
sqlite>
sqlite> alter table parle_prod rename 'sum(prod_price)' to prod_total;
sqlite>
sqlite> select * from parle_prod;
prod_name prod_total
```

108

109

Milano

Butter-Bite

59

60

```
PARLEg-Coconut 35
Parle-G 5
ParleG-Coconut 140
ParleG-Doubledip 23
ParleG-Pista 45
sqlite>
sqlite> select * from parle_prod;
prod_name prod_total
PARLEg-Coconut 35
Parle-G 5
ParleG-Coconut 140
ParleG-Doubledip 23
ParleG-Pista 45
sqlite> select * from product_info;
prod_id prod_name      prod_price
101 Parle-G 5
102 GoodDay 10
103 KrackJack
                10
104
    Sunfeast
               15
105
     Marie-Lite 20
106
     Nutri-Choice 35
     Hide-N-Seek 49
107
     Milano 59
108
109
     Butter-Bite 60
110
    Choco-Chips 70
111
    ParleG-Coconut 35
112 ParleG-Pista 45
113 ParleG-Doubledip 23
114 PARLEg-Coconut 35
```

```
115
      ParleG-Coconut 105
116
      Sunfeast
                    122
sqlite>
sqlite> select a.prod_id, b.prod_total from product_info a inner join parle_prod b on a.prod_name
= b.prod_name;
prod_id prod_total
101
      5
     140
111
     45
112
113
     23
114
     35
115
     140
sqlite>
sqlite> create table t1(col1 int);
sqlite> insert into t1 values(1), (2), (3), (4), (5);
sqlite> create table t2(col2 text);
sqlite> insert into t2 values('1'), ('2'), ('3'), ('4'), ('5');
sqlite>
sqlite> select * from t1;
col1
1
2
3
4
5
sqlite> select * from t2;
col2
1
```

```
2
3
4
5
sqlite> select * from t1 inner join t2 on t1.col1=t2.col2;
col1 col2
1 1
2 2
3 3
4 4
5 5
sqlite>
sqlite> select * from parle_prod;
prod_name prod_total
PARLEg-Coconut 35
Parle-G 5
ParleG-Coconut 140
ParleG-Doubledip 23
ParleG-Pista 45
sqlite> select * from product_info;
prod_id prod_name prod_price
101 Parle-G 5
102 GoodDay 10
103 KrackJack
                10
     Sunfeast
104
               15
    Marie-Lite 20
105
106
    Nutri-Choice 35
107 Hide-N-Seek 49
```

```
109
      Butter-Bite
                   60
110
      Choco-Chips
                  70
111
      ParleG-Coconut 35
112
      ParleG-Pista
113
      ParleG-Doubledip 23
114
      PARLEg-Coconut 35
115
      ParleG-Coconut 105
116
      Sunfeast
                  122
sqlite>
sqlite> select * from product_info left join parle_prod on parle_prod.prod_name =
product_info.prod_id;
prod_id prod_name prod_price prod_name prod_total
101
      Parle-G
                  5
102
      GoodDay
                   10
103
      KrackJack
                   10
104
      Sunfeast
                  15
105
      Marie-Lite
                   20
106
      Nutri-Choice 35
107
      Hide-N-Seek
                    49
                  59
108
      Milano
109
      Butter-Bite
                   60
110
      Choco-Chips
                    70
111
      ParleG-Coconut 35
112
      ParleG-Pista
                   45
113
      ParleG-Doubledip 23
114
      PARLEg-Coconut 35
115
      ParleG-Coconut 105
116
      Sunfeast
                  122
sqlite> select * from product_info inner join parle_prod on parle_prod.prod_name =
product_info.prod_name;
```

108

Milano

59

```
101
     Parle-G
                5
                      Parle-G
111
     ParleG-Coconut 35
                          ParleG-Coconut 140
112
     ParleG-Pista 45
                        ParleG-Pista 45
113
    ParleG-Doubledip 23
                          ParleG-Doubledip 23
114
    PARLEg-Coconut 35 PARLEg-Coconut 35
115
     ParleG-Coconut 105 ParleG-Coconut 140
salite>
sqlite> select * from product_info inner join parle_prod on product_info.prod_name =
parle_prod.prod_name;
prod_id prod_name prod_price prod_name prod_total
101
     Parle-G
                5
                      Parle-G
                                 5
     ParleG-Coconut 35
                          ParleG-Coconut 140
111
112
     ParleG-Pista 45
                        ParleG-Pista
                                     45
113
     ParleG-Doubledip 23
                          ParleG-Doubledip 23
114
     PARLEg-Coconut 35 PARLEg-Coconut 35
     ParleG-Coconut 105 ParleG-Coconut 140
115
sqlite> select * from product info left join parle_prod on product info.prod_name =
parle_prod.prod_name;
prod_id prod_name prod_price prod_name
                                            prod_total
101
     Parle-G
                5
                      Parle-G
                                 5
102
     GoodDay
                 10
103
     KrackJack
                 10
104
     Sunfeast
                 15
105
     Marie-Lite
                 20
106
     Nutri-Choice 35
     Hide-N-Seek
107
                   49
                 59
108
     Milano
109
     Butter-Bite
                 60
```

prod_id prod_name prod_price prod_name prod_total

```
110
    Choco-Chips 70
111
     ParleG-Coconut 35 ParleG-Coconut 140
112
    ParleG-Pista 45
                      ParleG-Pista 45
113 ParleG-Doubledip 23 ParleG-Doubledip 23
114 PARLEg-Coconut 35 PARLEg-Coconut 35
115 ParleG-Coconut 105 ParleG-Coconut 140
116
    Sunfeast
                122
sqlite>
sqlite> pragma table_info('parle_prod');
cid name type notnull dflt_value pk
0 prod_name TEXT 0 0
1 prod_total 0 0
sqlite>
sqlite> .tables
parle_prod product_info t1
                            t2
sqlite> select * from parle_prod;
prod_name prod_total
PARLEg-Coconut 35
          5
Parle-G
ParleG-Coconut 140
ParleG-Doubledip 23
ParleG-Pista 45
sqlite> select * from product_info;
prod_id prod_name prod_price
101 Parle-G 5
102 GoodDay 10
103
    KrackJack
               10
104
    Sunfeast
               15
```

```
105
     Marie-Lite
                  20
106
     Nutri-Choice 35
107
     Hide-N-Seek
                   49
108
     Milano
                 59
109
     Butter-Bite
                60
110
     Choco-Chips 70
111
     ParleG-Coconut 35
112
     ParleG-Pista
113
    ParleG-Doubledip 23
114
    PARLEg-Coconut 35
115
     ParleG-Coconut 105
116
     Sunfeast
                 122
sqlite>
sqlite> select * from parle_prod cross join product_info;
prod_name prod_total prod_id prod_name
                                            prod_price
PARLEg-Coconut 35
                     101
                           Parle-G
                                       5
PARLEg-Coconut 35
                      102
                           GoodDay
                                        10
PARLEg-Coconut 35
                      103
                           KrackJack
                                        10
PARLEg-Coconut 35
                      104
                           Sunfeast
                                       15
PARLEg-Coconut 35
                      105
                            Marie-Lite
                                        20
PARLEg-Coconut 35
                      106
                           Nutri-Choice 35
PARLEg-Coconut 35
                      107
                           Hide-N-Seek
                                         49
PARLEg-Coconut 35
                      108
                            Milano
                                       59
PARLEg-Coconut 35
                      109
                            Butter-Bite
                                        60
PARLEg-Coconut 35
                      110
                           Choco-Chips 70
PARLEg-Coconut 35
                      111
                            ParleG-Coconut 35
PARLEg-Coconut 35
                      112
                            ParleG-Pista
                                       45
PARLEg-Coconut 35
                            ParleG-Doubledip 23
                      113
PARLEg-Coconut 35
                           PARLEg-Coconut 35
                      114
PARLEg-Coconut 35
                      115
                            ParleG-Coconut 105
```

```
PARLEg-Coconut 35 116 Sunfeast
Parle-G
         5 101 Parle-G
                            5
Parle-G
         5
              102 GoodDay 10
sqlite>
sqlite> select * from product_info a inner join product_info b on a.prod_id = b.prod_id;
prod_id prod_name prod_price prod_id prod_name prod_price
101
   Parle-G
             5 101 Parle-G
                               5
102
   GoodDay 10 102 GoodDay 10
              10
103
    KrackJack
                    103
                         KrackJack
                                   10
104
    Sunfeast
             15
                    104
                        Sunfeast
                                  15
105
   Marie-Lite 20
                   105 Marie-Lite 20
106
   Nutri-Choice 35
                     106 Nutri-Choice 35
107
   Hide-N-Seek 49
                     107 Hide-N-Seek
                                     49
**************
sqlite>
sqlite> alter table product_info add column commodity_num int;
sqlite>
sqlite> select * from product_info;
101
   Parle-G
             5
102
   GoodDay
            10
103
    KrackJack
              10
104
    Sunfeast
             15
105
    Marie-Lite 20
106
    Nutri-Choice 35
107
    Hide-N-Seek 49
108
    Milano
            59
109
    Butter-Bite 60
110
    Choco-Chips 70
```

122

```
111
     ParleG-Coconut 35
112
     ParleG-Pista
113
     ParleG-Doubledip 23
114
     PARLEg-Coconut 35
115
     ParleG-Coconut 105
116
     Sunfeast
                 122
sqlite>
sqlite> update product_info set commodity_num = 114 where prod_id = 108;
sqlite> update product_info set commodity_num = 115 where prod_id = 109;
sqlite> update product_info set commodity_num = 106 where prod_id = 103;
sqlite> update product_info set commodity_num = 108 where prod_id = 106;
sqlite>
sqlite> select * from product_info;
101
     Parle-G
                 5
102
     GoodDay
                 10
103
     KrackJack
                  10
                        106
104
     Sunfeast
                 15
105
     Marie-Lite
                  20
106
     Nutri-Choice 35
                          108
107
     Hide-N-Seek
                   49
108
     Milano
                 59
                        114
109
     Butter-Bite
                  60
                        115
110
     Choco-Chips
                   70
111
     ParleG-Coconut 35
112
     ParleG-Pista
                  45
113
     ParleG-Doubledip 23
114
     PARLEg-Coconut 35
115
     ParleG-Coconut 105
116
     Sunfeast
                 122
```

```
sqlite>
sqlite> select * from product_info a inner join product_info b on a.prod_id = b.commodity_num;
prod_id prod_name prod_price commodity_num prod_id prod_name prod_price
commodity_num
106
     Nutri-Choice 35 108 103 KrackJack 10
                                                    106
108
     Milano
               59
                     114
                            106 Nutri-Choice 35
                                                     108
     PARLEg-Coconut 35
                                108
                                      Milano
                                               59
                                                     114
114
115
     ParleG-Coconut 105
                                109
                                      Butter-Bite 60
                                                      115
sqlite>
sqlite> select * from product_info a inner join product_info b on a.prod_id = b.commodity_num
order by a.prod_price;
prod_id prod_name
                   prod_price commodity_num prod_id prod_name prod_price
commodity num
    Nutri-Choice 35 108
106
                              103
                                     KrackJack 10
                                                    106
                               108 Milano
                                               59
114
     PARLEg-Coconut 35
                                                     114
                              106 Nutri-Choice 35
108
     Milano
               59
                      114
                                                     108
                                109
                                      Butter-Bite 60
115
     ParleG-Coconut 105
                                                      115
sqlite> select * from product_info a inner join product_info b on a.prod_id = b.commodity_num
order by a.prod_price asc;
prod_id prod_name prod_price commodity_num prod_id prod_name prod_price
commodity_num
106
     Nutri-Choice 35 108
                               103
                                     KrackJack 10
                                                     106
114
     PARLEg-Coconut 35
                                108
                                      Milano
                                               59
                                                     114
108
     Milano
               59
                     114
                              106 Nutri-Choice 35
                                                     108
115
     ParleG-Coconut 105
                                109
                                      Butter-Bite 60
                                                      115
sqlite>
sqlite> select * from product_info full outer join parle_prod on product_info.prod_name =
parle_prod.prod_name;
prod_total
```

```
101
     Parle-G
                5
                           Parle-G
                                       5
     GoodDay
                 10
102
103
     KrackJack
                10
                       106
104
     Sunfeast
                15
105
     Marie-Lite
                 20
106
     Nutri-Choice 35
                        108
107
     Hide-N-Seek 49
108
     Milano
                59
                      114
109
     Butter-Bite 60
                       115
110
     Choco-Chips 70
     ParleG-Coconut 35
111
                               ParleG-Coconut 140
                             ParleG-Pista 45
112
     ParleG-Pista
                45
113
     ParleG-Doubledip 23
                                 ParleG-Doubledip 23
114
     PARLEg-Coconut 35
                                PARLEg-Coconut 35
115
     ParleG-Coconut 105
                                 ParleG-Coconut 140
116
     Sunfeast
                122
sqlite> select * from product_info right join parle_prod on product_info.prod_name =
parle_prod.prod_name;
prod_id prod_name prod_price commodity_num prod_name prod_total
101
     Parle-G
                5
                  Parle-G
                                       5
111
     ParleG-Coconut 35
                                ParleG-Coconut 140
112
     ParleG-Pista 45
                             ParleG-Pista 45
113
     ParleG-Doubledip 23
                                 ParleG-Doubledip 23
114
     PARLEg-Coconut 35
                              PARLEg-Coconut 35
115
     ParleG-Coconut 105
                                ParleG-Coconut 140
sqlite>
sqlite> select * from product_info full outer join parle_prod on product_info.prod_name =
parle_prod.prod_name;
prod_id prod_name prod_price commodity_num prod_name prod_total
101 Parle-G 5 Parle-G 5
```

```
102
      GoodDay
                    10
103
      KrackJack
                   10
                          106
104
      Sunfeast
                   15
105
      Marie-Lite
                   20
106
      Nutri-Choice 35
                            108
107
      Hide-N-Seek
                     49
108
      Milano
                  59
                          114
109
      Butter-Bite
                  60
                           115
110
      Choco-Chips 70
111
      ParleG-Coconut 35
                                     ParleG-Coconut 140
                                   ParleG-Pista 45
112
      ParleG-Pista
                   45
113
      ParleG-Doubledip 23
                                      ParleG-Doubledip 23
114
      PARLEg-Coconut 35
                                     PARLEg-Coconut 35
115
      ParleG-Coconut 105
                                     ParleG-Coconut 140
116
      Sunfeast
                   122
sqlite>
sqlite> create table prod_delivery(prod_name text, status text);
sqlite> insert into prod_delivery values ('KrackJack', 'Shipped'), ('Sunfeast', 'Pending'), ('Marie-Lite',
'In-Transit');
sqlite>
sqlite> select * from prod_delivery;
prod_name status
KrackJack Shipped
Sunfeast Pending
Marie-Lite In-Transit
sqlite>
sqlite> select a.prod_name, c.status from product_info a inner join prod_delivery c on
a.prod_name = c.prod_name;
prod_name status
-----
KrackJack Shipped
```

```
Sunfeast Pending
Marie-Lite In-Transit
Sunfeast Pending
sqlite> select * from product_info a inner join prod_delivery c on a.prod_name = c.prod_name;
prod_id prod_name prod_price commodity_num prod_name status
103
     KrackJack 10 106 KrackJack Shipped
104
      Sunfeast 15
                               Sunfeast Pending
105
      Marie-Lite 20
                               Marie-Lite In-Transit
116
      Sunfeast 122
                                Sunfeast Pending
sqlite> select * from product_info a inner join prod_delivery c on a.prod_name = c.prod_name
inner join parle_prod on a.prod_name = parle_prod.prod_name;
sqlite>
sqlite> insert into prod_delivery values ('ParleG-Pista', 'Shipped'), ('Parle-G', 'In-Transit');
sqlite>
sqlite> select a.prod_name, b.prod_total, c.status from product_info a inner join parle_prod b on
a.prod name = b.prod name inner join prod delivery c on a.prod name = c.prod name;
prod_name prod_total status
Parle-G 5
                In-Transit
ParleG-Pista 45
                   Shipped
sqlite>
sqlite> select * from prod_delivery;
prod_name status
KrackJack Shipped
Sunfeast
           Pending
Marie-Lite In-Transit
ParleG-Pista Shipped
Parle-G In-Transit
sqlite> select * from parle_prod;
prod_name
               prod_total
```

```
PARLEg-Coconut 35
Parle-G
          5
ParleG-Coconut 140
ParleG-Doubledip 23
ParleG-Pista
           45
sqlite> select * from product_info;
101
    Parle-G
               5
102
     GoodDay
               10
103
     KrackJack
               10
                      106
104
     Sunfeast
                15
105
     Marie-Lite
                20
106
     Nutri-Choice 35
                       108
107
     Hide-N-Seek 49
108
     Milano
               59
                     114
109
     Butter-Bite
               60
                      115
110
     Choco-Chips 70
111
     ParleG-Coconut 35
112
     ParleG-Pista
                 45
113
     ParleG-Doubledip 23
114
     PARLEg-Coconut 35
115
     ParleG-Coconut 105
116
     Sunfeast
                122
```

SET Operations (UNION, INTERSECT and EXCEPT)

```
sqlite>
```

sqlite> select prod_name, prod_price from product_info union select prod_name, prod_total from parle_prod;

```
prod_name prod_price
```

```
Butter-Bite
             60
Choco-Chips 70
GoodDay
             10
Hide-N-Seek 49
KrackJack
            10
Marie-Lite
            20
Milano
            59
Nutri-Choice 35
PARLEg-Coconut 35
Parle-G
           5
ParleG-Coconut 35
ParleG-Coconut 105
ParleG-Coconut 140
ParleG-Doubledip 23
ParleG-Pista
            45
Sunfeast
            15
Sunfeast
            122
sqlite>
sqlite> select prod_name, prod_price from product_info intersect select prod_name, prod_total
from parle_prod;
prod_name prod_price
PARLEg-Coconut 35
Parle-G
           5
ParleG-Doubledip 23
ParleG-Pista
             45
sqlite>
sqlite> select prod_name, prod_price from product_info except select prod_name, prod_total from
parle_prod;
prod_name prod_price
```

```
Butter-Bite 60
Choco-Chips 70
GoodDay
          10
Hide-N-Seek 49
KrackJack
           10
Marie-Lite 20
Milano
          59
Nutri-Choice 35
ParleG-Coconut 35
ParleG-Coconut 105
Sunfeast 15
Sunfeast 122
sqlite>
sqlite> select * from parle_prod;
prod_name prod_total
PARLEg-Coconut 35
Parle-G
           5
ParleG-Coconut 140
ParleG-Doubledip 23
ParleG-Pista 45
sqlite> select * from prod_delivery;
prod_name status
KrackJack Shipped
Sunfeast Pending
Marie-Lite In-Transit
ParleG-Pista Shipped
Parle-G In-Transit
sqlite>
sqlite> select * from parle_prod union select * from prod_delivery;
```

```
prod_name prod_total
KrackJack
           Shipped
Marie-Lite In-Transit
PARLEg-Coconut 35
Parle-G
            5
Parle-G
           In-Transit
ParleG-Coconut 140
ParleG-Doubledip 23
ParleG-Pista
             45
ParleG-Pista Shipped
Sunfeast
            Pending
sqlite>
sqlite> select * from parle_prod union all select * from prod_delivery;
prod_name prod_total
PARLEg-Coconut 35
Parle-G
            5
ParleG-Coconut 140
ParleG-Doubledip 23
ParleG-Pista 45
KrackJack
            Shipped
Sunfeast
            Pending
Marie-Lite
           In-Transit
ParleG-Pista Shipped
Parle-G
           In-Transit
sqlite>
sqlite> select * from parle_prod union select * from prod_delivery union select prod_name,
prod_price from product_info;
prod_name prod_total
```

```
Butter-Bite
           60
Choco-Chips
           70
GoodDay
           10
Hide-N-Seek 49
KrackJack
          10
KrackJack
         Shipped
Marie-Lite
         20
Marie-Lite
         In-Transit
Milano
          59
Nutri-Choice 35
PARLEg-Coconut 35
Parle-G
         5
Parle-G
         In-Transit
ParleG-Coconut 35
ParleG-Coconut 105
ParleG-Coconut 140
ParleG-Doubledip 23
ParleG-Pista
           45
ParleG-Pista Shipped
Sunfeast
          15
Sunfeast
          122
Sunfeast
          Pending
sqlite>
sqlite> select * from product_info full outer join parle_prod full outer join prod_delivery;
status
101
   Parle-G 5
                          PARLEg-Coconut 35 KrackJack Shipped
101
    Parle-G
                          PARLEg-Coconut 35 Sunfeast
                                                       Pending
101
     Parle-G
                          PARLEg-Coconut 35 Marie-Lite In-Transit
101
     Parle-G 5
                          PARLEg-Coconut 35 ParleG-Pista Shipped
```

101	Parle-G	5	PARLEg-Coco	onut 3	35 Parle	-G In-Transit
101	Parle-G	5	Parle-G	5	KrackJack	Shipped
101	Parle-G	5	Parle-G	5	Sunfeast	Pending
101	Parle-G	5	Parle-G	5	Marie-Lite	In-Transit

sqlite> select * from product_info full outer join parle_prod full outer join prod_delivery limit 10;

prod_id prod_name prod_price commodity_num prod_name prod_total prod_name
status

.....

101	Parle-G	5	PARLEg-Coo	conut 3	5	Krack	Jack	Shipped
101	Parle-G	5	PARLEg-Coo	conut 3	5	Sunfe	east	Pending
101	Parle-G	5	PARLEg-Coo	conut 3	5	Mari	e-Lite	In-Transit
101	Parle-G	5	PARLEg-Coo	conut 3	5	Parle	G-Pist	a Shipped
101	Parle-G	5	PARLEg-Coo	conut 3	5	Parle	-G	In-Transit
101	Parle-G	5	Parle-G	5	Krack	Jack	Ship	ped
101	Parle-G	5	Parle-G	5	Sunfe	east	Pend	ing
101	Parle-G	5	Parle-G	5	Mari	e-Lite	In-Tr	ansit
101	Parle-G	5	Parle-G	5	Parle	G-Pist	a Ship	pped
101	Parle-G	5	Parle-G	5	Parle	-G	In-Tra	nsit

sqlite> select distinct product_info.prod_name from product_info full outer join parle_prod full outer join prod_delivery limit 10;

prod_name

Parle-G

GoodDay

KrackJack

Sunfeast

Marie-Lite

Nutri-Choice

Hide-N-Seek

Milano

Butter-Bite

Choco-Chips

UNIQUE, NOT NULL and PRIMARY KEY

```
sqlite>
sqlite> create table practo1(supplied_id int not null, item_supplied text);
sqlite>
sqlite> create table practo1(supplied_id int unique, item_supplied text);
sqlite>
sqlite> create table practo1(supplied_id int not null unique, item_supplied text);
sqlite>
sqlite> create table practo1(supplied_id int primary key, item_supplied text);
sqlite>
```