

# **SOLUTIONS**

Database diagram can be found *Database Layout- Table\_Horse.pdf*

## **SET 1 SQL Activities**

1.1

-

```
SELECT show_name,show_addr  
  
FROM show1;
```

1.2

-

```
SELECT name  
  
FROM horse  
  
WHERE born=1990;
```

1.3

-

```
SELECT show_name, show_addr  
  
FROM show1  
  
WHERE show_addr LIKE '%13%';
```

1.4

-

```
SELECT name, born, colour
FROM horse
WHERE gender='M'
AND colour IN ('grey','white');
```

1.5

-

```
SELECT name, died
FROM horse
WHERE died IS NOT NULL
ORDER BY died DESC;
```

1.6

-

```
SELECT DISTINCT event_name
FROM event;
```

1.7

-

```
SELECT event_code
FROM prize
WHERE place=1 AND
prizemoney BETWEEN 100 and 200;
```

1.8

-

```
SELECT name  
  
FROM horse  
  
WHERE colour='white';
```

1.9

-

```
SELECT horse_id,name  
  
FROM horse  
  
WHERE died IS NULL  
  
and born<1990  
  
ORDER BY horse_id;
```

1.10

-

```
SELECT name, born  
  
FROM horse  
  
WHERE died IS NOT NULL  
  
and born IN (1976, 1978, 1980, 1981);
```

## SET 2 SQL Activities

2.1

-

```
SELECT e.event_id, e.event_name, j.name  
FROM event e, judge j  
WHERE e.judge_id=j.judge_id;
```

2.2

-

```
SELECT DISTINCT h.name  
FROM horse h, entry e  
where h.horse_id=e.horse_id  
and e.place=1;
```

2.3

-

```
SELECT h.name, ev.event_name, en.place  
FROM horse h, entry en, event ev  
where h.horse_id=en.horse_id  
and en.event_id=ev.event_id;
```

2.4

-

```
SELECT e.event_name, s.show_name, s.show_addr, j.name, j.address
FROM event e, judge j, show1 s
where e.show_id=s.show_id
and e.judge_id=j.judge_id;
```

2.5

-

```
SELECT s.show_held, j.name, e.event_name
FROM event e, judge j, show1 s
where e.show_id=s.show_id
and e.judge_id=j.judge_id
and s.show_name='Dubbo';
```

2.6

-

```
SELECT ev.event_name, p.prizemoney
FROM event ev,entry en, prize p
where ev.event_id=en.event_id
and en.event_id=p.event_code
and p.place=1;
```

2.7

-

```
SELECT e.event_id, e.horse_id, p.place,p.prizemoney
FROM entry e, prize p
WHERE e.event_id=p.event_code
ORDER BY e.event_id, e.horse_id;
```

2.8

-

```
SELECT s.show_name,ev.event_name,p.prizemoney
FROM prize p, entry en,event ev,show1 s
WHERE p.event_code=en.event_id
AND en.event_id=ev.event_id
AND ev.show_id=s.show_id
AND p.place=1;
```

2.9

-

```
SELECT h.name,s.show_name,ev.event_name, en.place
FROM horse h,entry en,event ev,show1 s, judge j
WHERE h.horse_id=en.horse_id
AND en.event_id=ev.event_id
AND ev.show_id=s.show_id
```

AND ev.judge\_id=j.judge\_id

AND j.name='Green';

2.10

-

SELECT h.name,ev.event\_name

FROM horse h,entry en,event ev, judge j

WHERE h.horse\_id=en.horse\_id

AND en.event\_id=ev.event\_id

AND ev.judge\_id=j.judge\_id

AND (h.name='Star' OR h.name='Flash')

AND (j.name='Smith' AND j.address='Melbourne');

## SET 3 SQL Activities

3.1

-

```
SELECT ev.event_name,COUNT(*)  
  
FROM event ev, entry en  
  
WHERE ev.event_id=en.event_id  
  
GROUP BY ev.event_name;
```

3.2

-

```
SELECT show_name,COUNT(*)  
  
FROM show1  
  
GROUP BY show_name  
  
ORDER BY COUNT(*) DESC;
```

3.3

-

```
SELECT name, COUNT(*)  
  
FROM judge  
  
GROUP BY name;
```



3.4

-

```
SELECT s.show_name,s.show_held,COUNT(*)  
FROM event e, show1 s  
WHERE e.show_id=s.show_id  
GROUP BY s.show_name,s.show_held;
```

3.5

-

```
SELECT h.name,h.horse_id, SUM(p.prizemoney)  
FROM horse h, entry e,prize p  
WHERE h.horse_id=e.horse_id  
AND e.event_id=p.event_code  
GROUP BY h.name,h.horse_id;
```

3.6

-

```
SELECT h.name,h.horse_id, SUM(p.prizemoney)  
FROM horse h, entry e,prize p  
WHERE h.horse_id=e.horse_id  
AND e.event_id=p.event_code  
GROUP BY h.name,h.horse_id  
HAVING SUM(p.prizemoney)>=110;
```

3.7

-

```
S SELECT p.place, COUNT(*) Number,SUM(p.prizemoney) Total,  
MAX(p.prizemoney) Maximum, MIN(p.prizemoney) Minimum, AVG(p.prizemoney)  
Average  
  
FROM entry e,prize p  
  
WHERE e.event_id=p.event_code  
  
AND p.place IN (1,2)  
  
GROUP BY p.place;
```

3.8

-

```
SELECT h.horse_id, h.name  
  
FROM horse h, entry e  
  
WHERE h.horse_id=e.horse_id  
  
AND e.place IN (1,2)  
  
GROUP BY h.horse_id,h.name  
  
HAVING COUNT(*)>1;
```

3.9

-

```
SELECT h.name, COUNT(*)  
FROM horse h, entry en, event ev, judge j  
WHERE h.horse_id=en.horse_id  
AND en.event_id=ev.event_id  
AND ev.judge_id=j.judge_id  
AND j.name='Smith'  
AND j.address='Melbourne'  
GROUP BY h.horse_id,h.name;
```