

CSE370 : Database Systems Lab Mid | Spring 2024

Answer Sheet

ID : 22101710 | Name : Md. Anwar Hossain

No 1 Query (as Plain Text)	CREATE DATABASE DCBattles_22101710;
No 1 SS (of Query & Output in Shell)	<pre>MariaDB [(none)]> CREATE DATABASE DCBattles_22101710; Query OK, 1 row affected (0.002 sec)</pre>
No 2 Query (as Plain Text)	USE DCBattles_22101710;
No 2 SS (of Query & Output in Shell)	<pre>MariaDB [(none)]> USE DCBattles_22101710; Database changed</pre>
No 3 Query (as Plain Text)	select h.name, v.name, b.battle_date, b.battle_location from heroes h, villains v, battles b where h.hero_id=b.hero_id and v.villain_id=b.villain_id and b.hero_points<b.villain_points;

No 3 SS (of Query & Output in Shell)	<pre>MariaDB [DCBattles_22101710]> select h.name, v.name, b.battle_date, b.battle_location from heroes h, villains v, battles b where h.hero_id=b.hero_id and v.villain_id=b.villain_id and b.hero_points<b.villain_points;</pre> <table><thead><tr><th>name</th><th>name</th><th>battle_date</th><th>battle_location</th></tr></thead><tbody><tr><td>The Flash</td><td>Reverse Flash</td><td>2017-12-12</td><td>Central City</td></tr><tr><td>The Flash</td><td>Ares</td><td>2016-10-09</td><td>Metropolis</td></tr><tr><td>Green Arrow</td><td>Deathstroke</td><td>2018-06-11</td><td>Star City</td></tr></tbody></table> <pre>3 rows in set (0.000 sec)</pre>	name	name	battle_date	battle_location	The Flash	Reverse Flash	2017-12-12	Central City	The Flash	Ares	2016-10-09	Metropolis	Green Arrow	Deathstroke	2018-06-11	Star City
name	name	battle_date	battle_location														
The Flash	Reverse Flash	2017-12-12	Central City														
The Flash	Ares	2016-10-09	Metropolis														
Green Arrow	Deathstroke	2018-06-11	Star City														
No 4 Query (as Plain Text)	<pre>select h.name, count(b.hero_id) as total_battles from heroes h join battles b on h.hero_id=b.hero_id group by h.name;</pre>																
No 4 SS (of Query & Output in Shell)	<pre>MariaDB [DCBattles_22101710]> select h.name, count(b.hero_id) as total_battles from heroes h join battles b on h.hero_id=b.hero_id group by h.name;</pre> <table><thead><tr><th>name</th><th>total_battles</th></tr></thead><tbody><tr><td>Black Canary</td><td>1</td></tr><tr><td>Green Arrow</td><td>2</td></tr><tr><td>The Flash</td><td>2</td></tr><tr><td>Wonder Woman</td><td>1</td></tr></tbody></table> <pre>4 rows in set (0.001 sec)</pre>	name	total_battles	Black Canary	1	Green Arrow	2	The Flash	2	Wonder Woman	1						
name	total_battles																
Black Canary	1																
Green Arrow	2																
The Flash	2																
Wonder Woman	1																
No 5 Query (as Plain Text)	<pre>select distinct h.name, v.name from heroes h join battles b on h.hero_id = b.hero_id join villains v on b.villain_id = v.villain_id where b.battle_location like '%City%';</pre>																

<p>No 5 SS (of Query & Output in Shell)</p>	<pre>MariaDB [DCBattles_22101710]> select distinct h.name, v.name from heroes h join battles b on h.hero_id = b.hero_id jo in villains v on b.villain_id = v.villain_id where b.battle_location like '%City%'; +-----+-----+ name name +-----+-----+ The Flash Reverse Flash Green Arrow Deathstroke Wonder Woman Ares Black Canary Harley Quinn +-----+-----+ 4 rows in set (0.001 sec)</pre>
<p>No 6 Query (as Plain Text)</p>	<p>select v.name from villains v join battles b on v.villain_id = b.villain_id group by v.name having count(b.villain_id) > 1;</p>
<p>No 6 SS (of Query & Output in Shell)</p>	<pre>MariaDB [DCBattles_22101710]> select v.name from villains v join battles b on v.villain_id = b.villain_id group by v. name having count(b.villain_id) > 1; +-----+ name +-----+ Ares Deathstroke +-----+ 2 rows in set (0.001 sec)</pre>
<p>No 7 Query (as Plain Text)</p>	<p>select h.name from heroes h join battles b on h.hero_id = b.hero_id order by b.hero_points desc limit 1;</p>

<p>No 7 SS (of Query & Output in Shell)</p>	<pre>MariaDB [DCBattles_22101710]> select h.name from heroes h join battles b on h.hero_id = b.hero_id order by b.hero_points desc limit 1; +-----+ name +-----+ Wonder Woman +-----+ 1 row in set (0.001 sec)</pre>
<p>No 8 Query (as Plain Text)</p>	<p>select * from battles where (hero_points > any (select villain_points from battles b2 where battles.battle_location = b2.battle_location));</p>
<p>No 8 SS (of Query & Output in Shell)</p>	<pre>MariaDB [DCBattles_22101710]> select * from battles where (hero_points > any (select villain_points from battles b2 where battles.battle_location = b2.battle_location)); +-----+-----+-----+-----+-----+-----+-----+ Battle_id Hero_id Villain_id Battle_Date Hero_points Villain_points Battle_location +-----+-----+-----+-----+-----+-----+-----+ b03 h03 v02 2018-06-11 90 93 Star City b04 h04 v06 2016-10-10 99 98 Central City b05 h06 v05 2018-07-08 92 85 Star City b06 h03 v02 2017-06-11 90 88 Star City +-----+-----+-----+-----+-----+-----+-----+ 4 rows in set (0.003 sec)</pre>
<p>No 9 Query (as Plain Text)</p>	<p>select distinct (select battle_location from battles group by battle_location order by count(*) desc limit 1) as Max_Battles;</p>

<p>No 9 SS (of Query & Output in Shell)</p>	<pre>MariaDB [DCBattles_22101710]> select distinct (select battle_location from battles group by battle_location order by count(*) desc limit 1) as Max_Battles; +-----+ Max_Battles +-----+ Star City +-----+ 1 row in set (0.000 sec)</pre>
<p>No 10 Query (as Plain Text)</p>	<p>select distinct battle_date, (select name from heroes where hero_id = b1.hero_id) as hero, (select name from villains where villain_id = b1.villain_id) as villain from battles b1 where exists (select 1 from battles b2 where b1.hero_id = b2.hero_id and b1.battle_date != b2.battle_date);</p>
<p>No 10 SS (of Query & Output in Shell)</p>	