CSE-2007 LAB Assignment

Academic year: 2020-2021 Semester: Win

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DBMS Lab Sheet - SQL Joins

1. Consider the following **relations**

Tour guides

employee_number	employee_name	hourly_rate	months_employed
978	Siyabonge Nomvete	30	6
942	Jean-Marc Ithier	35	12
923	Tyrone Arendse	32	6
982	Mathew Booth	25	0

Tour locations

location_code	location_name	
1024	Table Mountain	
1025	Robben Island	
1026	Kruger National Park	
1027	St Lucia	

Tour Expeditions

location_code	employee_number	hours_worked	tourgroup_size
1024	978	5	8
1027	942	8	4
1025	923	3	20
1026	982	6	8
1024	978	5	8
1025	978	3	16

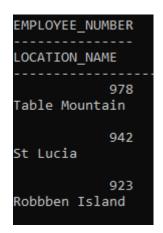
Answer the following using SQL Joins

EMPLOYEE_NUMBER EMPLOYEE_NAME		EMPLOYEE_NUMBER EMPLOYEE_NAME	LOCATION_CODE
HOURLY_RATE MONTHS_E	MPLOYED	HOURLY_RATE MONTHS_EMPLOYED	LOCATION_NAME
978 Siyabonge Nomvete			Table Mountain
30	6	923 Tyrone Arendse	1025
942 Jean-Marc Ithier		32 6	Robbben Island
35	12	982 Mathew Booth	1026 Kruger National Park

EMPLOYEE_NUMBER			
EMPLOYEE_NAME			
HOURLY_RATE MONTHS_EMPLOYED			
25 0			

LOCATION_CODE	${\tt EMPLOYEE_NUMBER}$	HOURS_WORKED	TOURGROUP_SIZE
1024	978	5	8
1027	942	8	4
1025	923	3	20
1026	982	6	8
1024	978	5	8
1025	978	3	16

i. Display the employee names with their respective tour locations.



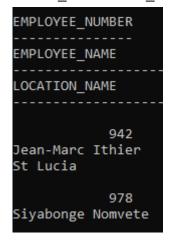
```
EMPLOYEE_NUMBER
LOCATION_NAME
982
Kruger National Park
978
Table Mountain
978
Robbben Island
```

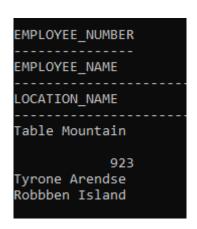
ii. Display the employee_numbers who had a trip to Table Mountain

iii. Display all the employees' names regardless of whether they have undertaken a trip or not? (use left outer join)

iv. How do we return the employee numbers, names and locations of all guides, including those who have not yet given a trip

```
SELECT DISTINCT
tour_guides.employee_number,employee_name,location_name
    FROM tour_guides
    LEFT JOIN tour_expeditions ON
    tour_guides.employee_number =
tour_expeditions.employee_number
    LEFT JOIN tour_locations ON
    our_locations.location_code=tour_expeditions.location_code;
```





v. Display all employees who've worked with a tour group of more than 10 people

```
SQL>SELECT employee_name
FROM tour_guides
WHERE employee_number IN (
SELECT employee_number
FROM tour_expeditions
WHERE tourgroup_size>10);
EMPLOYEE_NAME
Tyrone Arendse
Siyabonge Nomvete
```

vi. Find the names of all the employees who have the same hourly rate as Siyabonge Nomvete.(self join)

```
SQL>SELECT employee_name
FROM tour_guides
WHERE hourly_rate IN
(select hourly_rate
from tour_guides
```

where employee_name='Siyabonge Nomvete');

```
EMPLOYEE_NAME
-----Siyabonge Nomvete
```

vii. Display the employee name and employee number who have worked for more than 3 hours.

viii. Display the total information of the tour guides along with their hourly rate in asc order

SELECT * FROM tour_guides order by hourly_rate;

ix. Display the tour location in which tour group have visited more than once.

```
SELECT DISTINCT
    tour_expeditions.employee_number,employee_name,location_name
    FROM
    tour_locations,tour_expeditions,tour_guides
    WHERE tour_locations.location_code =
tour_expeditions.location_code AND
tour_expeditions.employee_number=tour_guides.employee_number;
```

```
EMPLOYEE_NUMBER
LOCATION_NAME
978
Table Mountain
942
St Lucia
923
Robbben Island
```