ANA 660 Advanced SQL

Homework #3

Using SQL, solve the following queries based on the projects, employees, workson, and rate tables discussed in the class (shown below). Note that the tables contain sample records only and do not represent all the possible records that could be stored in these tables.

projects

PROJECT_NUMBER	PROJECT_NAME	PROJECT_CITY
1	Eagle	NY
2	Super Jet	LA

workon

PROJECT_NUMBER	EMP_ID
1	10
1	11
2	10
2	20
2	11

employees

EMP_ID	EMP_NAME	RATE_CATEGORY	EMP_CITY	
10	Smith	В	NY	
11	eSmith	С	SF	
20	Smithe	С	LA	
15	eSmithe	D	SD	

rate

RATE_CATEGORY	RATE
Α	100
В	80
С	60
D	50

1. Using set operations, find the employee ID's of those employees who are not working on any projects.



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```
71 /*Q1*/
72 select emp_id
73 from employees
74 minus
75 select emp_id
76 from workon;
77

EMP_ID

15

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```

2. Using set operations and sub-query, find the names of those employees who are not working on any projects.

Code/Output:



3. Using set operations, find the names of employees who work on both the Eagle and Super Jet projects.



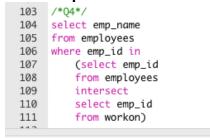
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4. Using set operations, find the names of employees who work on either the Eagle or the Super Jet projects.

Code/Output:





5. Using non-correlated sub-query, find the names of employees who work on both the Eagle and Super Jet projects.



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```
86  /*Q5*/
87  select emp_name
88  from employees
89  where emp_id in
90    (select emp_id
91    from workon
92    group by emp_id
93    having count(*)>1);
```



6. Using correlated sub-query, find the names of employees who work on both the Eagle and Super Jet projects.

Code/Output:

```
95 /*Q6*/
96 select emp_name
97 from employees e
98 where exists
99 (select emp_id
100 from workon w
101 where w.emp_id=e.emp_id
102 group by emp_id
103 having count(*)>1);
104
```



7. Using sub-query, find the names of employees who work on both the Eagle and Super Jet projects and have a rate greater or equal to 80.



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EMP_NAME
Smith

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