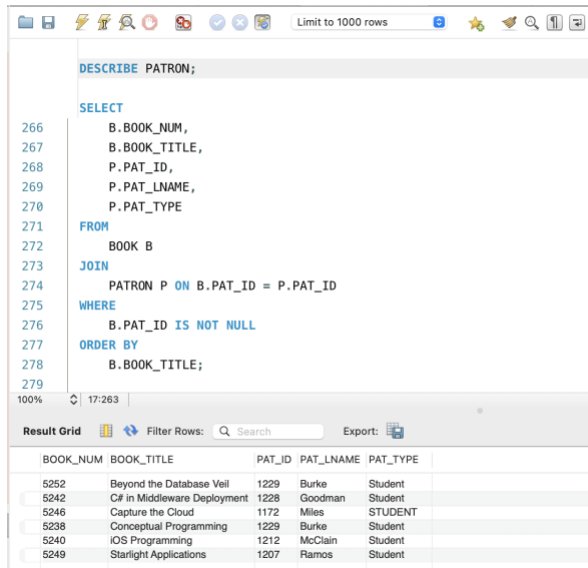


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Task 6.1P: Report with SQLs and Output

1.



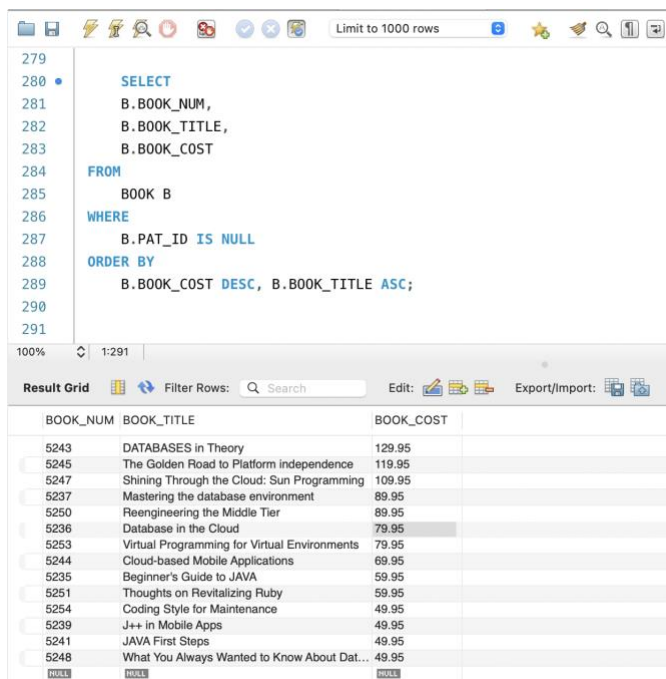
The screenshot shows the SQL Developer interface. The query editor contains the following SQL code:

```
DESCRIBE PATRON;  
  
SELECT  
  B.BOOK_NUM,  
  B.BOOK_TITLE,  
  P.PAT_ID,  
  P.PAT_LNAME,  
  P.PAT_TYPE  
FROM  
  BOOK B  
JOIN  
  PATRON P ON B.PAT_ID = P.PAT_ID  
WHERE  
  B.PAT_ID IS NOT NULL  
ORDER BY  
  B.BOOK_TITLE;
```

The result grid displays the following data:

BOOK_NUM	BOOK_TITLE	PAT_ID	PAT_LNAME	PAT_TYPE
5252	Beyond the Database Veil	1229	Burke	Student
5242	CF in Middleware Deployment	1228	Goodman	Student
5246	Capture the Cloud	1172	Miles	STUDENT
5238	Conceptual Programming	1229	Burke	Student
5240	iOS Programming	1212	McClain	Student
5249	Starlight Applications	1207	Ramos	Student

2.



The screenshot shows the SQL Developer interface. The query editor contains the following SQL code:

```
SELECT  
  B.BOOK_NUM,  
  B.BOOK_TITLE,  
  B.BOOK_COST  
FROM  
  BOOK B  
WHERE  
  B.PAT_ID IS NULL  
ORDER BY  
  B.BOOK_COST DESC, B.BOOK_TITLE ASC;
```

The result grid displays the following data:

BOOK_NUM	BOOK_TITLE	BOOK_COST
5243	DATABASES in Theory	129.95
5245	The Golden Road to Platform independence	119.95
5247	Shining Through the Cloud: Sun Programming	109.95
5237	Mastering the database environment	89.95
5250	Reengineering the Middle Tier	89.95
5236	Database in the Cloud	79.95
5253	Virtual Programming for Virtual Environments	79.95
5244	Cloud-based Mobile Applications	69.95
5235	Beginner's Guide to JAVA	59.95
5251	Thoughts on Revitalizing Ruby	59.95
5254	Coding Style for Maintenance	49.95
5239	J++ in Mobile Apps	49.95
5241	JAVA First Steps	49.95
5248	What You Always Wanted to Know About Dat...	49.95
NULL	NULL	NULL

3.

The screenshot shows a database query editor with a toolbar at the top. The SQL query is as follows:

```
290
291 •
292     SELECT
293     B.BOOK_TITLE,
294     P.PAT_ID,
295     CONCAT(P.PAT_FNAME, ' ', P.PAT_LNAME) AS FULLNAME,
296     P.PAT_TYPE
297 FROM
298     BOOK B
299 JOIN
300     PATRON P ON B.PAT_ID = P.PAT_ID
301 WHERE
302     B.PAT_ID IS NOT NULL
303     AND B.BOOK_SUBJECT = 'Programming'
304 ORDER BY
305     B.BOOK_TITLE, P.PAT_LNAME, P.PAT_FNAME;
306
```

Below the query editor, the "Result Grid" is displayed with the following data:

BOOK_TITLE	PAT_ID	FULLNAME	PAT_TYPE
Conceptual Programming	1229	Gerald Burke	Student
iOS Programming	1212	Iva McClain	Student

4.

The screenshot shows a database query editor with a toolbar at the top. The SQL query is as follows:

```
312
313
314     SELECT
315     A.AU_ID,
316     A.AU_FNAME,
317     A.AU_LNAME,
318     B.BOOK_NUM,
319     B.BOOK_TITLE
320 FROM
321     AUTHOR A
322 JOIN
323     WRITES W ON A.AU_ID = W.AU_ID
324 JOIN
325     BOOK B ON W.BOOK_NUM = B.BOOK_NUM
326 WHERE
327     B.BOOK_SUBJECT = 'Database'
328 ORDER BY
329     B.BOOK_TITLE ASC, A.AU_LNAME ASC;
330
```

Below the query editor, the "Result Grid" is displayed with the following data:

AU_ID	AU_FNAME	AU_LNAME	BOOK_NUM	BOOK_TITLE
262	Xia	Chiang	5252	Beyond the Database Veil
251	Hugo	Bruer	5243	DATABASES in Theory
185	Benson	Reeves	5237	Mastering the database environment
229	Carmin	Salvadore	5248	What You Always Wanted to Know About Datab...

5.

The screenshot shows a SQL IDE interface. The query editor contains the following SQL code:

```
SELECT
  B.BOOK_NUM,
  B.BOOK_TITLE,
  COUNT(B.PAT_ID) AS `Times Checked Out`
FROM
  BOOK B
WHERE
  B.PAT_ID IS NOT NULL
GROUP BY
  B.BOOK_NUM, B.BOOK_TITLE
ORDER BY
  `Times Checked Out` DESC, B.BOOK_TITLE ASC;
```

Below the query editor, the 'Result Grid' is displayed, showing the results of the query. The columns are BOOK_NUM, BOOK_TITLE, and Times Checked O... (truncated). The results are as follows:

BOOK_NUM	BOOK_TITLE	Times Checked O...
5252	Beyond the Database Veil	1
5242	C# in Middleware Deployment	1
5246	Capture the Cloud	1
5238	Conceptual Programming	1
5240	iOS Programming	1
5249	Starlight Applications	1

6.

The screenshot shows a SQL IDE interface. The query editor contains the following SQL code:

```
SELECT
  B.BOOK_NUM,
  B.BOOK_TITLE,
  ROUND(AVG(DATEDIFF(C.CHECK_IN_DATE, C.CHECK_OUT_DATE)), 2) AS `Average Days Kept`
FROM
  BOOK B
JOIN
  CHECKOUT C ON B.BOOK_NUM = C.BOOK_NUM
WHERE
  C.CHECK_IN_DATE IS NOT NULL
GROUP BY
  B.BOOK_NUM, B.BOOK_TITLE
HAVING
  COUNT(*) >= 4
ORDER BY
  `Average Days Kept` DESC;
```

Below the query editor, the 'Result Grid' is displayed, showing the results of the query. The columns are BOOK_NUM, BOOK_TITLE, and Average Days Kept. The results are as follows:

BOOK_NUM	BOOK_TITLE	Average Days Kept
5240	iOS Programming	7.00
5237	Mastering the database environment	4.60
5254	Coding Style for Maintenance	4.50
5235	Beginner's Guide to JAVA	4.44
5236	Database in the Cloud	4.25
5244	Cloud-based Mobile Applications	3.75
5238	Conceptual Programming	3.20