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CPS510 - A5

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Section #: 06

Lab Number: 5

Oct 23, 2024

Shell Script 1:
Gather all customers with membership and group them by the price point of each membership

```
  GNU nano 4.8                                              a.sh
sqlplus64 "b7chau/01239245@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(Host=oracle12c.scs.ryerson.ca)
(Port=1521))(CONNECT_DATA=(SID=orcl12c)))"<<EOF

SELECT
    m.subscriptionCharge,
    COUNT(c.customerID) AS num_customers
FROM
    membership m
JOIN
    payment p ON m.membershipID = p.customerID
JOIN
    customer c ON c.customerID = p.customerID
GROUP BY
    m.subscriptionCharge
ORDER BY
    num_customers DESC;

EXIT;
EOF
```

```
b7chau@europa:~/databases510$ ./a.sh

SQL*Plus: Release 12.1.0.2.0 Production on Tue Oct 22 23:29:37 2024

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Oracle Database 12c Enterprise Edition Release 12.1.0.2.0 - 64bit Production
With the Partitioning, Oracle Label Security, OLAP, Advanced Analytics
and Real Application Testing options

SQL> SQL>  2   3    4    5    6    7    8    9   10   11   12   13
SUBSCRIPTIONCHARGE NUM_CUSTOMERS
------------------ -------------
                99             2

SQL> SQL> Disconnected from Oracle Database 12c Enterprise Edition Release 12.1.0.2.0 - 64bit Production
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and Real Application Testing options
```

Shell Script 2:

List the top 2 movies based on rating and show the movie name, director and rating

```
  GNU nano 4.8                                          b.sh
sqlplus64 "b7chau/01239245@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(Host=oracle12c.scs.ryerson.ca)
(Port=1521))(CONNECT_DATA=(SID=orcl12c)))"<<EOF

SELECT
    movieName,
    movieDirector,
    movieRating
FROM
    movie
ORDER BY
    movieRating DESC
FETCH FIRST 2 ROWS ONLY;

EXIT;
EOF
```

```
b7chau@europa:~/databases510$ ./b.sh

SQL*Plus: Release 12.1.0.2.0 Production on Tue Oct 22 23:34:30 2024

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SQL> SQL>   2    3    4    5    6    7    8    9
MOVIENAME
-------------------------------------------------
MOVIEDIRECTOR                                    MOVIERATING
------------------------------------------- ----------
CREED
Ryan Coogler                                             10

Avatar The Way Of The Water
James Cameron                                            9


SQL> SQL> Disconnected from Oracle Database 12c Enterprise Edition Release 12.1.0.2.0 - 64bit Production
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and Real Application Testing options
```

Shell Script 3

Fetch all customers who have not yet made a payment

```
  GNU nano 4.8                                          c.sh
sqlplus64 "b7chau/01239245@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(Host=oracle12c.scs.ryerson.ca)
(Port=1521))(CONNECT_DATA=(SID=orcl12c)))"<<EOF

SELECT
    customerID, firstName, lastName
FROM
    customer
WHERE
    customerID IN (
        SELECT customerID
        FROM customer
        MINUS
        SELECT customerID
        FROM payment
    );


EXIT;
EOF
```

```
b7chau@europa:~/databases510$ ./c.sh

SQL*Plus: Release 12.1.0.2.0 Production on Wed Oct 23 00:01:25 2024

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and Real Application Testing options

SQL> SQL>   2    3    4    5    6    7    8    9   10   11   12
CUSTOMERID FIRSTNAME
---------- -----------------------------------------------
LASTNAME
-----------------------------------------------
         3 Some
Body


SQL> SQL> SQL> Disconnected from Oracle Database 12c Enterprise Edition Release 12.1.0.2.0 - 64bit Production
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and Real Application Testing options
b7chau@europa:~/databases510$
```

Shell Script 4

Get the average cost of movies based on genre

```
  GNU nano 4.8                                           d.sh
sqlplus64 "b7chau/01239245@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(Host=oracle12c.scs.ryerson.ca)
(Port=1521))(CONNECT_DATA=(SID=orcl12c)))"<<EOF

SELECT
    movieGenre,
    AVG(moviePrice) AS avg_price,
    COUNT(movieID) AS total_movies
FROM
    movie
GROUP BY
    movieGenre
ORDER BY
    avg_price DESC;


EXIT;
EOF
```

```
b7chau@europa:~/databases510$ ./d.sh

SQL*Plus: Release 12.1.0.2.0 Production on Wed Oct 23 00:03:46 2024

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With the Partitioning, Oracle Label Security, OLAP, Advanced Analytics
and Real Application Testing options

SQL> SQL>  2    3    4    5    6    7    8    9   10
MOVIEGENRE                                          AVG_PRICE TOTAL_MOVIES
-------------------------------------------------- ---------- ------------
Family                                             12.3266667            3
Action                                                  9.99            1

SQL> SQL> SQL> Disconnected from Oracle Database 12c Enterprise Edition Release 12.1.0.2.0 - 64bit Production
With the Partitioning, Oracle Label Security, OLAP, Advanced Analytics
and Real Application Testing options
b7chau@europa:~/databases510$
```

Shell Script 5
List the total amount spent by each customer

```
  GNU nano 4.8                                                e.sh
sqlplus64 "b7chau/01239245@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(Host=oracle12c.scs.ryerson.ca)
(Port=1521))(CONNECT_DATA=(SID=orcl12c)))"<<EOF

SELECT_
    c.customerID,
    c.firstName,
    c.lastName,
    SUM(m.moviePrice) AS total_spent
FROM
    customer c
JOIN
    payment p ON c.customerID = p.customerID
JOIN
    movie m ON p.paymentID = m.movieID  -- assuming paymentID links to movie purchases
GROUP BY
    c.customerID, c.firstName, c.lastName
ORDER BY
    total_spent DESC;


EXIT;
EOF
```

```
b7chau@europa:~/databases510$ ./e.sh

SQL*Plus: Release 12.1.0.2.0 Production on Wed Oct 23 00:08:22 2024

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With the Partitioning, Oracle Label Security, OLAP, Advanced Analytics
and Real Application Testing options

SQL> SQL>   2    3    4    5    6    7    8    9   10   11   12   13   14   15
CUSTOMERID FIRSTNAME
---------- ----------------------------------------------
LASTNAME                                         TOTAL_SPENT
---------------------------------------------- -----------
        2 Jane
Doe                                                      15

        1 John
Bosko                                                 10.99


SQL> SQL> SQL> Disconnected from Oracle Database 12c Enterprise Edition Release 12.1.0.2.0 - 64bit Production
With the Partitioning, Oracle Label Security, OLAP, Advanced Analytics
and Real Application Testing options
b7chau@europa:~/databases510$
```

UNIX Interactive Menu for DROP, CREATE, INSERT, SELECT

```
  GNU nano 4.8                                                                    menu.sh
CONN_STRING="b7chau/01239245@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(Host=oracle12c.scs.ryerson.ca)(Port=1521))(CONNECT_DATA=(SID=orcl12c)))"

while true; do
    # Enter command (Drop, Create, Insert)
    echo "Please enter a command (Drop, Create, Insert, Selecit)"
    echo "Type 'exit' to quit"
    read -p "> " u_input
    u_input=$(echo "$u_input" | tr '[:upper:]' '[:lower:]')  # Convert to lowercase

    if [[ "$u_input" == "drop" ]]; then
        read -p "Enter Table to Drop: " to_drop
        # Do the drop table stuff here
        echo "Dropping table: $to_drop"
        sqlplus64 -s "$CONN_STRING" << EOF
        DROP TABLE $to_drop;
        EXIT;
EOF

    elif [[ "$u_input" == "create" ]]; then
        read -p "Enter Table Name: " table_name
        read -p "Enter Values (separated by spaces): " values
        # Do create table stuff here
        echo "Creating table: $table_name with values: ${values[@]}"
        sqlplus64 -s "$CONN_STRING" << EOF
        CREATE TABLE $table_name ($values);
        EXIT;
EOF

    elif [[ "$u_input" == "insert" ]]; then
        read -p "Enter Table Name: " table_name
        read -p "Enter Values (separated by spaces): " values
        # Do insert table stuff here
        echo "Inserting into table: $table_name values: ${values[@]}"
        sqlplus64 -s "$CONN_STRING" <<EOF
        INSERT INTO $table_name VALUES ($values);
        COMMIT;
        EXIT;
EOF

    elif [[ "$u_input" == "select"]]; then
        read -p "Enter Table Name: " table_name
        read -p "Enter Values (separated by spaces): " values
        # Do query stuff here
        sqlplus64 -s "$CONN_STRING" <<EOF
        SELECT $values FROM $table_name VALUES;
        EXIT;
EOF

    elif [[ "$u_input" == "exit" ]]; then
        echo "Exiting..."
        exit 0

    else
        continue
    fi
done
```

```
b7chau@europa:~/databases510$ ./menu.sh
Please enter a command (Drop, Create, Insert, Select)
Type 'exit' to quit
> create
Enter Table Name: test
Enter Values (separated by spaces): t1 INTEGER, t2 VARCHAR(30)
Creating table: test with values: t1 INTEGER, t2 VARCHAR(30)

Table created.

Please enter a command (Drop, Create, Insert, Select)
Type 'exit' to quit
> insert
Enter Table Name: test
Enter Values (separated by spaces): 1, 'test'
Inserting into table: test values: 1, 'test'

1 row created.


Commit complete.

Please enter a command (Drop, Create, Insert, Select)
Type 'exit' to quit
> select
Enter Table Name: test
Enter Values (separated by spaces): *

        T1 T2
---------- ------------------------------
         1 test

Please enter a command (Drop, Create, Insert, Select)
Type 'exit' to quit
> drop
Enter Table to Drop: test
Dropping table: test

Table dropped.

Please enter a command (Drop, Create, Insert, Select)
Type 'exit' to quit
> exit
Exiting...
b7chau@europa:~/databases510$ _
```

```
SQL> SELECT table_name FROM user_tables;

TABLE_NAME
--------------------------------------------------------------
ADMIN
CUSTOMER
MEMBERSHIP
MOVIE
PAYMENT
TEST

6 rows selected.

SQL> SELECT * FROM test;

        T1 T2
---------- ------------------------------
         1 test

SQL> SELECT table_name FROM user_tables;

TABLE_NAME
--------------------------------------------------------------
ADMIN
CUSTOMER
MEMBERSHIP
MOVIE
PAYMENT

SQL> _
```