

SQL:

Results Messages

```

SELECT TOP 1000 [CustomerID]
      ,[FirstName]
      ,[LastName]
      ,[HighestPrice]
FROM [bbl1354].[dbo].[RedSpending]

```

```

/***** Script for SelectTopNRows command from SSMS *****/
SELECT TOP 1000 [CustomerID]
, [FirstName]
, [LastName]
, [HighestPrice]
FROM [bbl1354].[dbo].[RedSpending]

```

Results Messages

	CustomerID	FirstName	LastName	HighestPrice
1	29485	Catherine	Abel	20.994
2	29546	Christopher	Beck	1466.01
3	29644	Brigid	Cavendish	858.90
4	29736	Terry	Eminhizer	20.994
5	29796	Jon	Grande	858.90
6	29829	Jeffrey	Kurtz	20.994
7	29957	Kevin	Liu	858.90
8	30050	Krishna	Sunkammurali	20.994

Python:

```
Python 2.7.12 Shell
File Edit Shell Debug Options Window Help

Python 2.7.12 (v2.7.12:d33e0cf91556, Jun 27 2016, 15:19:22) [MSC v.1500 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: \\freesia.csil.sfu.ca\userdata\bbl\Desktop\A3part3.py =====
All and only colors of products in the Product table in alphabetical order, including Multi but excluding NULL:
Color: Black
Color: Blue
Color: Grey
Color: Multi
Color: Red
Color: Silver
Color: Silver/Black
Color: White
Color: Yellow

please select a color name from the above list: red

CustomerID: 30050 Name: Krishna Sunkammurali HighestPrice: 20.99
CustomerID: 29957 Name: Kevin Liu HighestPrice: 858.90
CustomerID: 29929 Name: Jeffrey Kurtz HighestPrice: 20.99
CustomerID: 29796 Name: Jon Grande HighestPrice: 858.90
CustomerID: 29736 Name: Terry Eminhizer HighestPrice: 20.99
CustomerID: 29644 Name: Brigid Cavendish HighestPrice: 858.90
CustomerID: 29546 Name: Christopher Beck HighestPrice: 1466.01
CustomerID: 29485 Name: Catherine Abel HighestPrice: 20.99
>>>
```

```
Python 2.7.12 Shell
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>>>
===== RESTART: \\freesia.csil.sfu.ca\userdata\bbl\Desktop\A3part3.py =====
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Color: Silver/Black
Color: White
Color: Yellow

please select a color name from the above list: red

CustomerID: 30050 Name: Krishna Sunkammurali HighestPrice: 20.99
CustomerID: 29957 Name: Kevin Liu HighestPrice: 858.90
CustomerID: 29929 Name: Jeffrey Kurtz HighestPrice: 20.99
CustomerID: 29796 Name: Jon Grande HighestPrice: 858.90
CustomerID: 29736 Name: Terry Eminhizer HighestPrice: 20.99
CustomerID: 29644 Name: Brigid Cavendish HighestPrice: 858.90
CustomerID: 29546 Name: Christopher Beck HighestPrice: 1466.01
CustomerID: 29485 Name: Catherine Abel HighestPrice: 20.99
>>>
===== RESTART: \\freesia.csil.sfu.ca\userdata\bbl\Desktop\A3part3.py =====
All and only colors of products in the Product table in alphabetical order, including Multi but excluding NULL:
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Color: Blue
Color: Grey
Color: Multi
Color: Red
Color: Silver
Color: Silver/Black
Color: White
Color: Yellow

please select a color name from the above list: silver/black

CustomerID: 30113 Name: Raja Venugopal HighestPrice: 48.59
CustomerID: 30102 Name: Roger Van Houten HighestPrice: 37.25
CustomerID: 30050 Name: Krishna Sunkammurali HighestPrice: 48.59
CustomerID: 29975 Name: Walter Mays HighestPrice: 24.29
CustomerID: 29982 Name: Melissa Marple HighestPrice: 24.29
CustomerID: 29957 Name: Kevin Liu HighestPrice: 48.59
CustomerID: 29929 Name: Jeffrey Kurtz HighestPrice: 48.59
CustomerID: 29922 Name: Pamela Kotc HighestPrice: 48.59
CustomerID: 29796 Name: Jon Grande HighestPrice: 48.59
CustomerID: 29638 Name: Rosmarie Carroll HighestPrice: 48.59
CustomerID: 29938 Name: Frank Campbell HighestPrice: 48.59
CustomerID: 29531 Name: Cory Booth HighestPrice: 24.29
CustomerID: 29568 Name: Donald Blanton HighestPrice: 48.59
CustomerID: 29546 Name: Christopher Beck HighestPrice: 48.59
>>> |
```



Author: Bei Bei Li - 301254625

```
#import the library for the database interface
import pymysql
#connect to
connection = pymysql.connect(host='cypress.csil.sfu.ca', user='s_bbli', password='3trrbAjmTjMde4P3', database='bbli354')

#set cursor
cursor = connection.cursor()

#display colors of products excluding NULL, sorted in alphabetical order
print "All and only colors of products in the Product table in alphabetical order, including Multi but excluding NULL: "
myquery = "SELECT DISTINCT P.Color FROM AdventureWorksLT.SalesLT.Product P WHERE P.Color IS NOT NULL ORDER BY P.Color;"
cursor.execute(myquery)
result = cursor.fetchone()
while result:
    out = "Color: " + str(result[0])
    print out
    result = cursor.fetchone()

print

#accept a single string input
color = raw_input("please select a color name from the above list: ")
print

#create view table for that color input
if ((color == "Silver/Black") or (color == "silver/black") or (color == "Silver/black") or (color == "silver/Black")):
    viewname = 'SilverBlackSpending'
else:
    viewname = color + 'Spending'
check = "IF OBJECT_ID('dbo.' + viewname + ',' + 'v') IS NOT NULL DROP VIEW dbo." + viewname + ";"
cursor.execute(check)

myquery2 = "CREATE VIEW " + viewname + " AS SELECT C.CustomerID, C.FirstName, C.LastName, MAX(D.UnitPrice) AS HighestPrice \
FROM AdventureWorksLT.SalesLT.Customer C, AdventureWorksLT.SalesLT.SalesOrderHeader H, AdventureWorksLT.SalesLT.SalesOrderDetail D, AdventureWorksLT.SalesLT.Product P \
WHERE C.CustomerID = H.CustomerID AND H.SalesOrderID = D.SalesOrderID AND D.ProductID = P.ProductID AND P.Color = '" + color + "' \
" GROUP BY C.CustomerID, C.FirstName, C.LastName;"

cursor.execute(myquery2)

#create output from view in desc order by last name and first name
myquery3 = "SELECT * FROM " + viewname + " ORDER BY LastName DESC, FirstName DESC;"
cursor.execute(myquery3)
result1 = cursor.fetchone()
while result1:
    out = "CustomerID: " + str(result1[0]) + " Name: " + str(result1[1]) + " " + str(result1[2]) + " \tHighestPrice: " + str(result1[3])
    print out
    result1 = cursor.fetchone()

cursor.close()
connection.commit()
connection.close()
```



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