END-TERM PRACTICAL

"Scripting Languages - R"

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Course - MCA (1-B)

Ans(1)

```
<html>
<head>
    <title> display data in table format </title>
</head>
<body>
 <?php
        $con = mysql_connect("localhost", "root", "");
        if(!$con)
        {
          die("not connected".mysql_error());
        }
        echo "connection open"."<br/>";
        $sldb = mysql_select_db("coupt ", $con);
        if(!$sldb)
         {
          die("not found ".mysql_error());
         }
        echo "Database selected"."<br/>";
```

```
$query = "select * from customer;
$sql = mysql_query($query);

echo "<table border='1'>
<tr>
  <th> C_NO </th>
  <th> C_Name </th>
  <th> Item_Purchased </th>
  <th> Mob_no</th>
</tr>";
 while ($row = mysql_fetch_array($sql))
 {
   echo "<tr>";
    echo "<td>" $row['c_no']. "</td>";
    echo "<td>" $row['c_name']. "</td>";
    echo "<td>" $row['item_purchased']. "</td>";
    echo "<td>" $row['mob_no']."</td>";

   echo "</tr>";

 }
 echo "</table>";

 ?>
</body>
</html>
```

File | C:/Users/amitr/OneDrive/Documents/output1.html

"; $sldb = mysql_select_db("coust",$con); if(!$sldb) { die("not found".mysql_error()); } echo "Database selected"."
"; $query = "select * from customer"; $sql = mysql_query($query); echo ""; while($row = mysql_fetch_array($sql)) { echo ""; echo ""; echo ""; echo ""; echo ""; echo ""; } echo "

C_No	C_Name	Item_Purchased	Mob_no
".$row['c_no']."	".$row['c_name']."	".$row['item_purchased']."	".$row['mob_no']."

"; ?>

Ans(2)

```
<!DOCTYPE html>
<html>
<head>
<script src = "https://ajax.googleapis.com
              /ajax/libs/jquery/3.4.0/jquery
              .min.js">
</script>
<script>
  $(document).ready(function(){
    $("#hide").click(function(){
      $("p").hide();
    });
    $("#show").click(function(){
      $("p").show();
    });
  });
</script>
</head>
<body>
<h2> Program to show and hide using jquery</h2>
<p> Hi this is javascript and today is a good
    day</p>
```

Program to show and hide using jQuery

Hi this is javascript and today is a good day

hide show

```
<button id="hide">hide</button>
<button id="show">show</button>
</body>
</html>
```

Ans (3) & (4)

Analysing csv dataset

here the dataset is on murders of different states in different regions. we will now study the sheet and plot various graphs.

⇒ setting working directory

```
setwd("M:/rlang/rp")
```

⇒ reading of .csv file

```
<- read.csv("mud1.csv")
```

Descriptive statistics on dataset mud1

here using "ggplot() library" & "dplyr() library"

(1) histogram -

```
ggplot(data, aes(y = state, x = gunmurders)) +
geom_bar(stat = "identity")
```

(2) piechart

```
ggplot(data, aes(y=murders, fill=region
    , x=region)) +
geom_bar(width=1, stat="identity") +
coord_polar("x", start=0)
```

(3) Scatter plot

```
ggplot(data, aes(y=population Density, x=
murders, group=population Density, colour=
murders)) + geom_line() + geom_point()
```

(4) Boxplot

```
ggplot(data, aes(x=murders, y=region))
+geom_boxplot()
```

Code for viewing dataset, summary, top 5 datapoints, structure of dataset etc

- setwd("M:/Manoj/rp")
- getwd()
- data<-read.csv("mud1.csv")

- view(data)
- head(data)
- tail(data)
- tail(data,10) #reading least 10 datapoints
- str(data)
- summary(data)
- data$state.length
- sum(is.na(data))
- data_size ← factor(data)
- str(data_size)
- summary(data_size)
- levels(data_size)
- data_table ← table(data_size)
- pie(data_table)

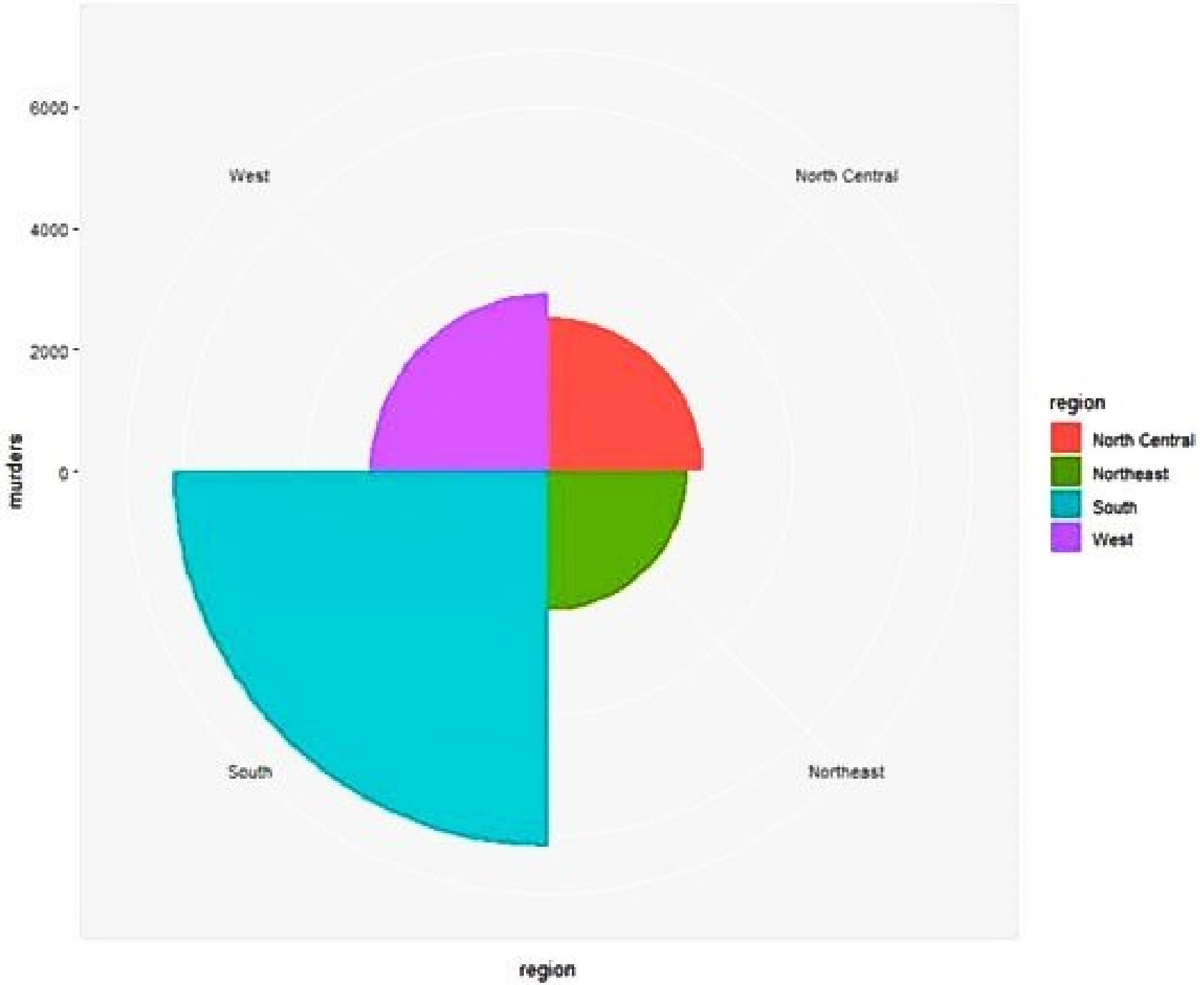
Inference from the statistical data on dataset

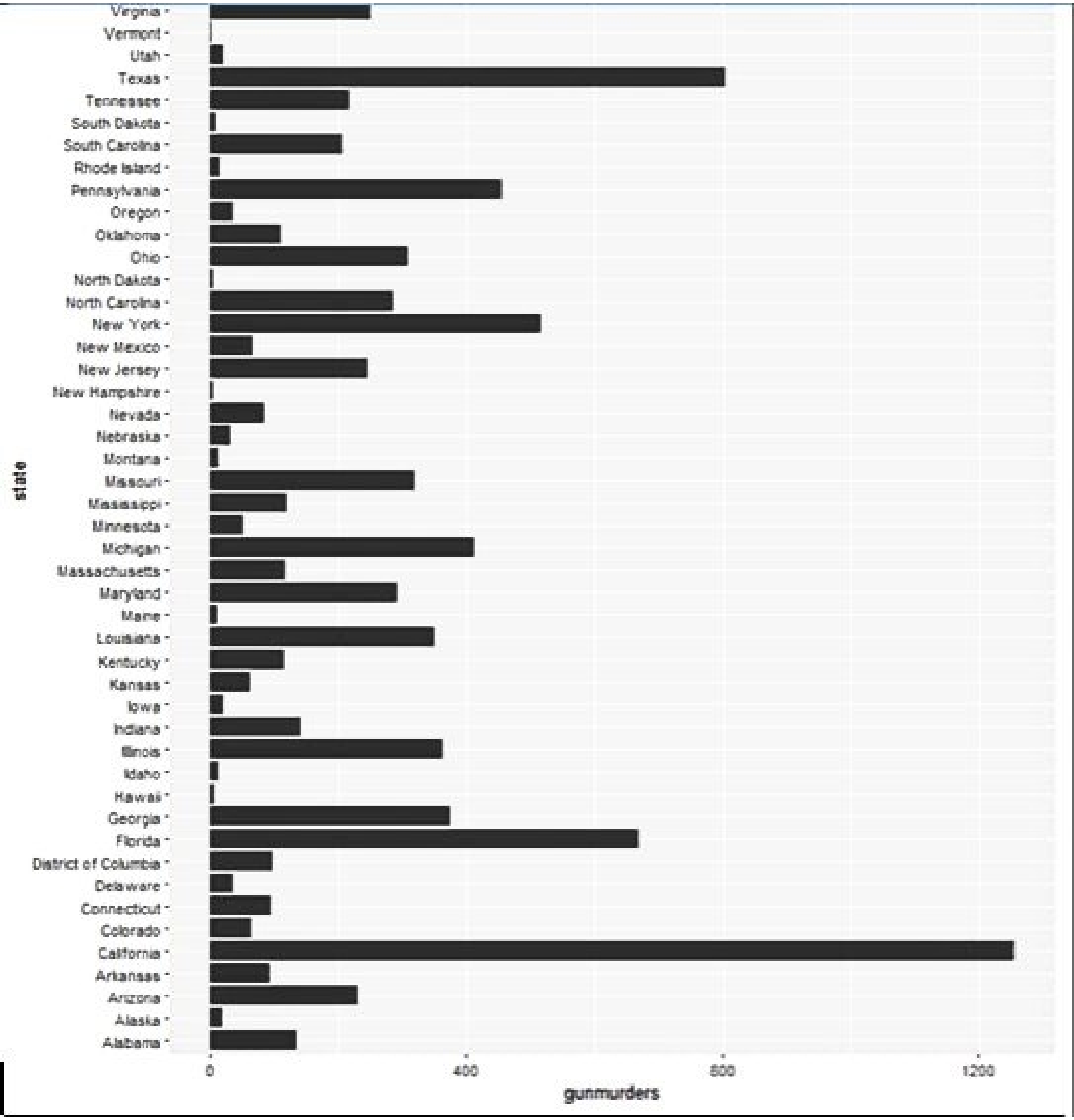
mud 1

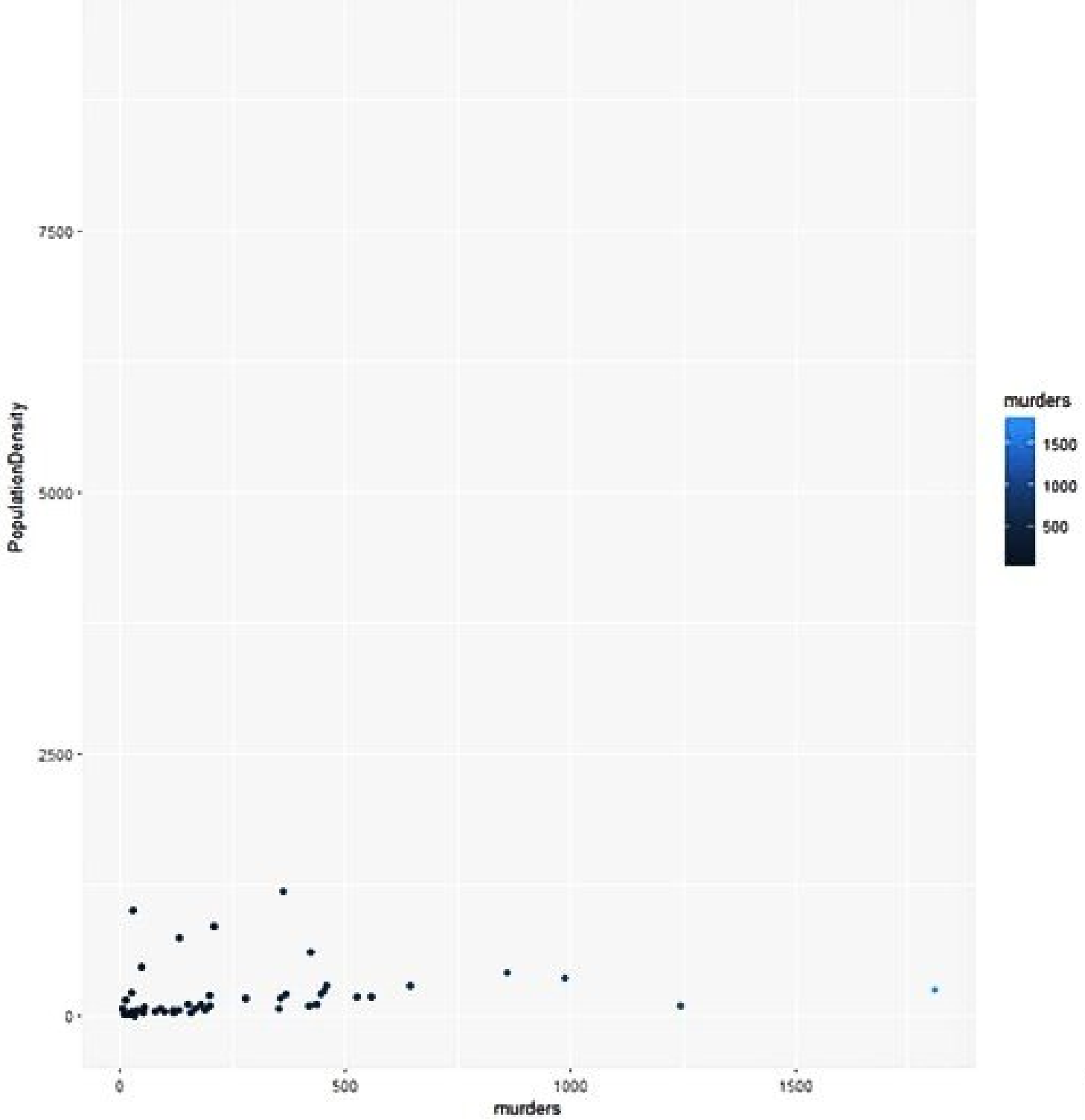
(1) California state of West Region experiences most murders & gunmurders

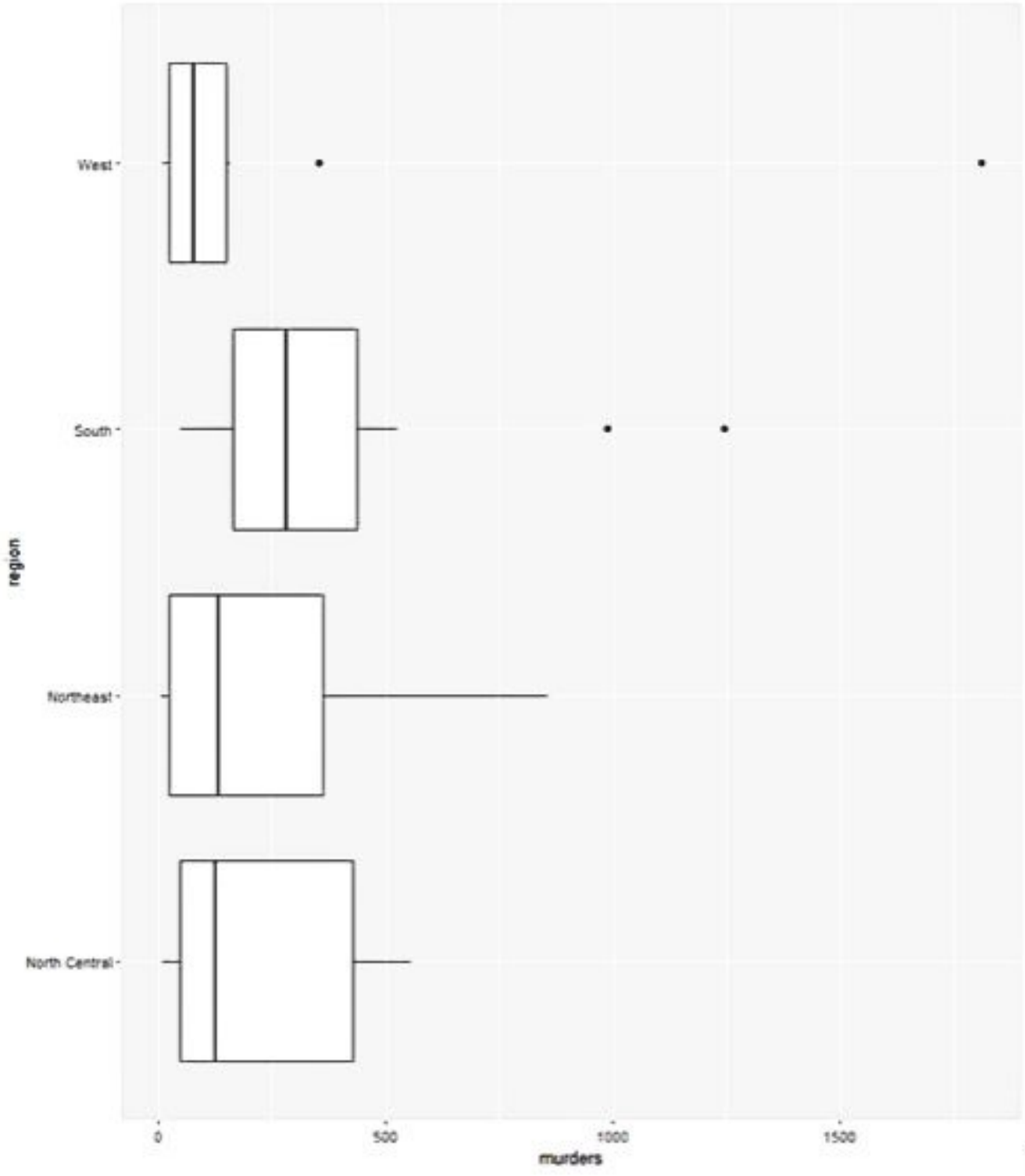
(2) Vermont state of North-east region experiences least murders and gunmurders

(3) Wyoming state of west region tops when it comes to having maximum gunownership which is 0.5970


6000
4000
2000
0
murders
West
North Central
South
Northeast
region
region
North Central
Northeast
South
West


Virginia
Vermont
Utah
Texas
Tennessee
South Dakota
South Carolina
Rhode Island
Pennsylvania
Oregon
Oklahoma
Ohio
North Dakota
North Carolina
New York
New Mexico
New Jersey
New Hampshire
Nevada
Nebraska
Montana
Missouri
Mississippi
Minnesota
Michigan
Massachusetts
Maryland
Maine
Louisiana
Kentucky
Kansas
Iowa
Indiana
Illinois
Idaho
Hawaii
Georgia
Florida
District of Columbia
Delaware
Connecticut
Colorado
California
Arkansas
Arizona
Alaska
Alabama
state
0
400
800
1200
gunmurders


7500
5000
2500
0
PopulationDensity
0
500
1000
1500
murders
murders
1500
1000
500


West
South
Northeast
North Central
region
0
500
1000
1500
murders

```
> library(dplyr)
> library(ggplot2)
> setwd("H:/rlang/rp")
> getwd()
[1] "H:/rlang/rp"
> data<- read.csv("mudl.csv")
> View(data)
> head(data)
       state abb region population PopulationDensity murders gunmurders gunownership
1    Alabama  AL  South    4779736             94.650     199        135        0.517
2     Alaska  AK   West     710231              1.284      31         19        0.578
3    Arizona  AZ   West    6392017             57.050     352        232        0.311
4   Arkansas  AR  South    2915918             56.430     130         93        0.553
5 California  CA   West   37253956            244.200    1811       1257        0.213
6   Colorado  CO   West    5029196             49.330     117         65        0.347
> tail(data)
          state abb       region population PopulationDensity murders gunmurders gunownership
46       Vermont  VT    Northeast     625741             67.730       7          2        0.420
47      Virginia  VA        South    8001024            207.300     369        250        0.351
48    Washington  WA         West    6724540            102.600     151         93        0.331
49 West Virginia  WV        South    1852994             77.060      55         27        0.554
50     Wisconsin  WI North Central    5686986            105.200     151         97        0.444
51       Wyoming  WY         West     563626              5.851       8          5        0.597
> tail(data,10)
          state abb       region population PopulationDensity murders gunmurders gunownership
42  South Dakota  SD North Central     814180             10.860      14          8        0.566
43     Tennessee  TN        South    6346105            156.600     356        219        0.439
44         Texas  TX        South   25145561             98.070    1246        805        0.359
45          Utah  UT         West    2763885             34.300      52         22        0.439
46       Vermont  VT    Northeast     625741             67.730       7          2        0.420
47      Virginia  VA        South    8001024            207.300     369        250        0.351
48    Washington  WA         West    6724540            102.600     151         93        0.331
49 West Virginia  WV        South    1852994             77.060      55         27        0.554
50     Wisconsin  WI North Central    5686986            105.200     151         97        0.444
51       Wyoming  WY         West     563626              5.851       8          5        0.597
> str(data)
'data.frame':   51 obs. of  8 variables:
 $ state            : chr  "Alabama" "Alaska" "Arizona" "Arkansas" ...
 $ abb              : chr  "AL" "AK" "AZ" "AR" ...
 $ region           : chr  "South" "West" "West" "South" ...
 $ population       : int  4779736 710231 6392017 2915918 37253956 5029196 3574097 897934 601723 19687653 ...
 $ PopulationDensity: num  94.65 1.28 57.05 56.43 244.2 ...
 $ murders          : int  199 31 352 130 1811 217 131 48 231 987 ...
 $ gunmurders       : int  135 19 232 93 1257 65 97 38 99 669 ...
 $ gunownership     : num  0.517 0.578 0.311 0.553 0.213 0.347 0.187 0.255 0.038 0.245 ...
> summary(data)
    state               abb                region            population        PopulationDensity      murders          gunmurders       gunownership    
 Length:51          Length:51          Length:51          Min.   :  563626   Min.   :   1.284   Min.   :   7.0   Min.   :   2.0   Min.   :0.03360  
 Class :character   Class :character   Class :character   1st Qu.: 1696962   1st Qu.:  46.185   1st Qu.:  49.5   1st Qu.:  24.5   1st Qu.:0.30655  
 Mode  :character   Mode  :character   Mode  :character   Median : 4339367   Median : 102.600   Median : 151.0   Median :  97.0   Median :0.39860  
                                                          Mean   : 6071789   Mean   : 394.549   Mean   : 273.2   Mean   : 184.4   Mean   :0.36895  
                                                          3rd Qu.: 6836084   3rd Qu.: 224.350   3rd Qu.: 384.0   3rd Qu.: 268.0   3rd Qu.:0.44450  
                                                          Max.   :37253956   Max.   :10298.000   Max.   :1811.0   Max.   :1257.0   Max.   :0.59870  
> data$state.Length
NULL
> sum(is.na(data))
[1] 0
> ggplot(data, aes(y=state, x=murders))+ geom_bar(stat = "identity")
> ggplot(data, aes(y=state, x=gunmurders))+ geom_bar(stat = "identity")
> ggplot(data, aes(y =PopulationDensity, x =murders, group=PopulationDensity, colour=murders)) +geom_line() + geom_point()
```