GFHV Dehradun

Name: Mohit Joshi | Univ Roll no: 2101122 | Course: MCA
Student ID: 21561029 | Enroll no: PV-2101122 | Subname: SL and R Lab
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3 Answer We're using here Titanic dataset to analyze:

Load data:

⇒ titanic <- read.csv("c:/Users/Desktop/titanic.csv", header = TRUE, sep = ",")

Peek at your data:

⇒ View (titanic)
This help us to familiarising with the data set.

⇒ Head (titanic, 10)
return first 10 rows.

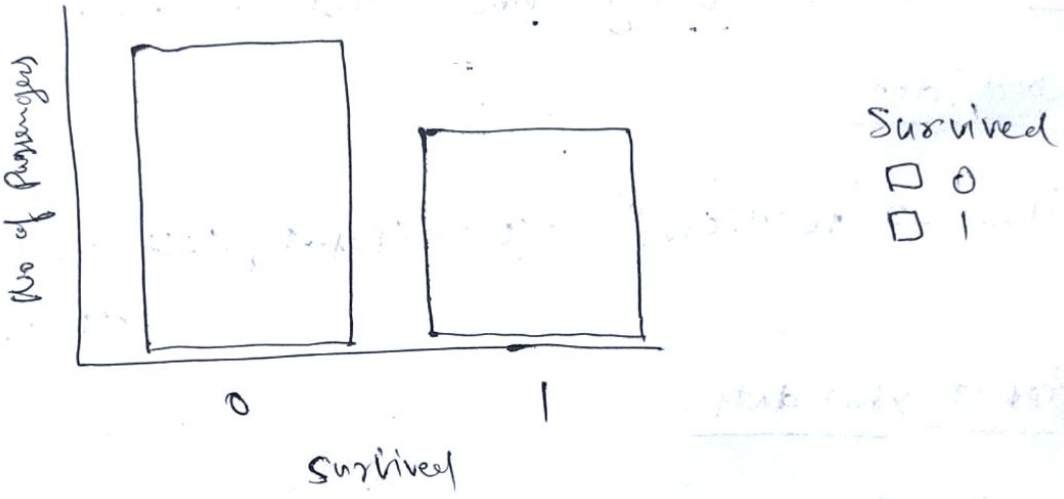
⇒ tail (titanic, 10)
return Bottom, 10, rows.

⇒ names (titanic)
This helps us in checking and all the variables in the data set.

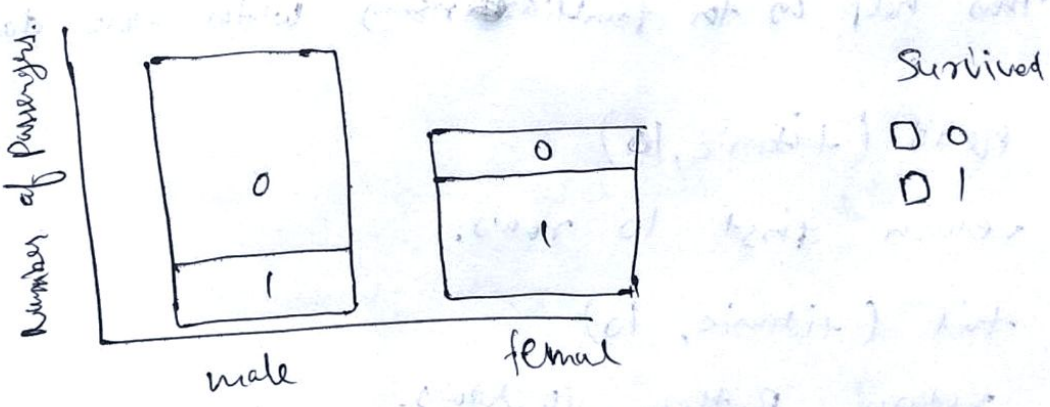
⇒ Summary (titanic)
It is one of the most important functions that help in summarising each attribute in the dataset.
It gives the descriptive statistics of the data.

- Analysis & visualizations:
  - Survival rate:

```
ggplot(titanic, aes(x = Survived)) + geom_bar()
```



  - Survival rate based gender:

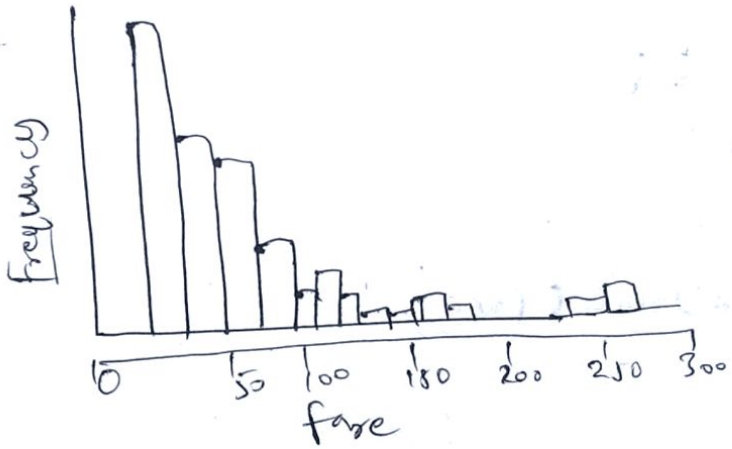



```
ggplot(titanic, aes(x=Sex, fill = survived)) +
    theme_bw() + geom_bar() +
    labs(y = "Number of Passengers",
         title = "Survival Rate by Gender")
```

- Distribution of fare rate:

hist (titanic$ fare, main = "Fare Per Person", x lab = "fare", col = 'grey' breaks = 40, Xlim = c(0, 300))

Fare Per Person



Answer

Descriptive Statistics:

Summary: Gives us the descriptive stats like.

In case of Numerical data:

Gives Mean, Mode, Median, Range.

Measure of Central Tendency:

⇒ mean (titanic$ fare) [on Average person spent $32 to board the titanic]

32.20421

⇒ mode (titanic $ Age) [Most common age on Titanic]

24

⇒ median (train $ fare)

14.542

Measure of spread:

⇒ range (titanic $ fare)

0.000 512.3292

[It shows lowest and highest value of fare]

⇒ var(titanic $ Fare)

2469.937

⇒ sqrt(var(titanic $ Fare))

49.69343

Inferential Statistics:

- Hypothesis Testing:

new_data ← subset(titanic, titanic $ Pclass == 1)

z.test2 = function(a, b, n){
sample_mean = mean(a)
pop_mean = mean(b)
c = nrow(n)
var_b = var(b)
zeta = (sample_mean - pop_mean)/sqrt(var_b/c)
return zeta.

call function

z.test2(new_data $ survived, titanic $ survived, new_data)

7.423828

(A

2 Answer Student Registration in PHP:

```
<!DOCTYPE html>
<html>
<head>
    <title> PHP Registration form </title>
</head>
<body>
  <h1> Registration form </h1>
  <form method = "POST">
    <table>
      <tr>
        <td colspan = "2">
            <?php echo @$msg;??
        </td>
      </tr>
      <td>
      <tr> <b> Student Name </b></td>
      <td> <input type = "text" placeholder = "Student
                                    Name"> </td>
    </tr>
    <tr>
      <td><b> Enter your Email </b></td>
      <td> <input type = "email" placeholder = "email">
      </td>
    </tr>
    <tr>
      <td> <b> Enter Password </b> </td>
      <td><input type = "password"> </td>
    </tr>
```

```
<tr>
  <td><b> Enter your Address: </b></td>
  <td><textarea name = "add"> Enter Address </textarea>
  </td>
</tr>

<tr>
  <td> <b> Gender </b></td>
  <td> Male <input type = "radio">
       Female <input type = "radio">
  </td>
</tr>

<tr>
  <td colspan = "2" align = "center">
  <input type = "submit">
  <input type = "reset">
  </td>
</tr>

</table>

</form>

</body>

</html>
```

```
<?php
  extract ( $_POST);
  if ( isset ( $save)){
    $h = implode (",", $hobb);
if ( $return){
   $msg = "<font color='red'>" ucfirst ($e). "
          already exists choose another email </font>";
else{
 $msg = "<font color="blue"> Your data saved </font>";
}
}
}
?>
```

1 Answer

```
<html>
  <head> Validate Method </head>
  <body>
    <form name = "myform" action = "/action_page.php"
      onsubmit = "return validate()" method = "post">
  Name: <input type = "text" name = "fname"> <br>
  Password: <input type = "password" name = "pass"> <br>
  Course: <input type = "text" name = "course"> <br>
  <input type = "submit" value = "submit">
<script>
  function validate(){
   let x = document.forms["myform"]["fname"].value;
   let x1 = document.forms["myform"]["pass"].value;
   let x2 = document.forms["myform"]["course"].value;
   if (x == "" && x1 == "" && x2 == ""){
     alert("Name, password, course must be filled out");
   else if (x == "" && x1 == ""){
     alert("name, password must be filled out");
   }else if (x == "" && x2 == ""){
     alert("name, Course must be filled out");
   }
```

```
else if ( x1 == "" && x2 == "" ){
    alert (" password and course must be filled out");
else if ( x == "" ){
    alert (" name must be filled out");
else if ( x1 == "" ){
    alert (" password must be filled out");
}
elseif ( x2 == "" ){
    alert (" course must be filled out");
}
    return false;
}
</script>
</form>
</body>
</html>
```