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Subject Name : Scripting Languages & R Lab

Date : 15-03-2022

Course : M.C.A.

Branch : -

Section : 'C'

Subject code : PMC-103

Paper Type : Regular (End Term)

* SCRIPTING LANGUAGES :

Ques 1 :

Sol : Source Code -

```
<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 ["myforms"] ["pass"].value;
  let x2 = document.forms ["myform"] ["course"].value;
{ if (x == "" && x1 == "" && x2 = "")
    { alert ("Name, Password and Course Must be filled
        Out!");
    {
```

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```
else if (x == "" && x1 == "")
    { alert ("Name & Password must be filled out!");
    }
else if (x1 == "" & x2 == "")
    { alert ("Password & Course must be filled out! ");
    }
else if (x == "")
    { alert ("Name must be filled out! ");
    }
else if (x1 == "")
    { alert ("Password must be filled out! ");
    }
else if (x2 == "")
    { alert ("Course must be filled out! ");
    }
  return false;
}
</ script >
< / form >
< /body >
< /html >
```

Ques 2:

Ans:

```
<!DOCTYPE html>
<html lang="en">
<head>
<title> PHP Registration form </title>
</head>
<body>
<?php>
$nameErr = "";
$emailErr = "";
$genderErr = "";
$websiteErr = "";
$name = "";
$email = "";
$gender = "";
$comment = "";
$website = "";
if ($_SERVER["REQUEST_METHOD"] == "POST")
{ if (empty ($_POST["name"]))
{ $nameErr = "Name Field is required"; }
else
{ $name = test_input ($_POST["name"]);
if (!preg_match ("/^[a-zA-Z-']*$/", $name))
{nameErr = "Only letters and white space allowed";
}
}
```

```
if (empty($_POST["email"]))
  { $emailErr = "Email field is Required"; }
else
  { $email = test_input($_POST["email"]);
      if (!filter_var($email, FILTER_VALIDATE_EMAIL))
        { $emailErr = "Invalid email format!";
        }
  }
if (empty($_POST["website"]))
  { $website = ""; }
else
  { $website = test_input($_POST["website"]);
    if (!preg_match("/\b(?:(?:https?|ftp):\/\/|www\.)
        [-a-z0-9+&@#\/%?=~_|!:,.;]*[a-z0-9+&@#\/%
        =~_|]/i", $website))
        {$websiteErr = "Invalid URL!";
        }
  }
if (empty($_POST["comment"]))
  { $comment = ""; }
else
  { $comment = test_input($_POST["comment"]);
  }
```

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```
if (empty ($_POST["gender"]))
    { $genderErr = "Gender is required !"; }
else
   { $gender = test_input ($_POST["gender"]);
    }
}

function test_input ($data)
    { $data = trim ($data);
      $data = stripslashes ($data);
      $data = htmlspecialchars ($data);
      return $data;
    }
?>

<h1> PHP Registration Form </h1>
<form method = "post" action = "<?php echo htmlspecialchars
      ($_SERVER["PHP_SELF"]); ?> ">

<b> Enter Name : </b> <input type="text" name = <?php echo
      $name; ?> " >

<span class = "error" > * <?php echo $nameErr; ?> </span>
<br> <br>
<b> Enter E-mail </b> <input type= "text" name= "email"
      value = <?php echo $email; ?> " >

<span class = "error" > * <?php echo $emailErr; ?> </span>
<br> <br>
```

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```
<b> Select Gender </b>
<input type = "radio" name = "gender" <? php if (isset ($gender)
    && $gender == "male") echo "checked"; ? >
value = "male"> Male
<input type = "radio" name = "gender" <? php if (isset ($gender)
    && $gender = "female") echo "checked"; ? >
value = "female"> Female
<input type = "radio" name = "gender" <? php if (isset ($gender)
    && $gender = "Other") echo "checked"; ? >
value = "other"> Other
<span class = "error"> * <? php echo $genderErr; ? > </span>
<br> <br>
<input type = "submit" name = "Submit" value = "Register">
</ form >
<? php >
echo "<h2> Your Input </h2>";
echo $name;
echo "<br>";
echo $email;
echo "<br>";
echo $website;
echo "<br>";
echo $comment;
echo "<br>";
```

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```
echo $gender ;
?>
</body>
</html>
```

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R - LAB :

Ques3 :

```
# Dplyr library function
library (dplyr)
setwd ("E :/MCA")
mydata <- read.csv ("most runs .csv").
mydata

# Descriptive statistics using R
summary (mydata)
dim (mydata)
str (mydata)
names (mydata)
nrow (mydata)
ncol (mydata)
head (mydata, n=6)
tail (mydata ,n = 6)

# select function
mydata <- select (mydata, batsman, average)
mydata

# filter function
mysubdata1 <- filter (mydata , average > 50)
mysubdata1
```

```
# arrange function
mysubdata2 <- arrange (mydata , desc (average))
mysubdata3 <- arrange (mydata , desc (strikerate))

# Top & Bottom 5 average Batsman
head (mysubdata2)
tail (mysubdata2)

# mutate function (to add columns to data set)
mydata <- mutate (mydata , Performance = runs - balls)

# DIFFERENT PLOTS USING DATASET

# HISTOGRAM

hist ( mydata $ average , col = c ('red', 'yellow', 'green'),
    xlab = "Average", ylab = "Players", break = "50")

# SCATTER-PLOT

plot (mydata $ strikerate , col = c ('red', 'yellow', 'green'),
    xlab = "Players", ylab = "strikerate")

# BAR PLOT

barplot (mydata $ average , col = c ('red', 'yellow', 'green'),
    xlab = "Players", ylab = "Average")
```

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BOX-PLOT

```
boxplot (mydata $average , col= c ('red', 'yellow', 'green'),
        xlab = "Players", ylab = "Average")
```

Ques4 :

```
# descriptive statistics

    summary (mydata)
    dim (mydata)
    str (mydata)
    names (mydata)

# Inferential statistics

# chi-squared test.

    model <- chisq.test (mydata)
    model

# Output , p-value = 0.446283 > 0.05

# Hence, mydata is highly correlated & we can accept

# NULL HYPOTHESIS
```

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Correlation Coefficient

cor(mydata $ Batsman , mydata $ runs)

output is : 0.99324 > 0.8

Therefore, batsman & runs are strongly correlated

to each other.

ANOVA TEST:

mysubdata4 <- aov (mydata $ runs ~ mydata $ average)

mysubdata4

Output is : Pr (>F) is 0.0013 , as this value is LESS THAN

0.05 , Hence, we REJECT NULL HYPOTHESIS

and accept the alternative hypothesis.

T-TEST:

t.test (mydata , mu = 100)

This test evaluates T-SCORE for the data-set

Output : p-value is 0.446283 > 0.05

Hence, we accept NULL HYPOTHESIS

X—X