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UNIV ROLL - 2101101
ENROLL NO - PU-21010101
COURSE - MCA 1ST SEM

PAPER - SCRIPTING LANGUAGE AND R LAB
PAPER CODE - PMC 103

Ans 1.

```
<html>
<body>
  <div class = "mail">
  <h2> Input your Name and submit the form </h2>
  <form name = "form1" action = "#" onsubmit = "validate()">
    <ul>
      <li> <input type= 'text' name = 'name1' placeholder
                                    = 'first name" /> </li>
      <li> input type = 'text' name = 'name2' placeholder
                                    = "Last name" /> </li>
      <li> <input type = "submit" name = "submit" value
                                    = "Submit" /> </li>
    </ul>
  </form>
</div>
<script>
  function validate(){
    var empt1 = document.forms["form1"]["name1"].
                                    value;
    var empt2 = document.forms["form1"]["name2"].value;

    if (empt1 == "" && empt == "") {
        alert("Enter first name \n Enter Last name");
    }
    else if (empt1 == "" && empt2 != "") {
        alert("Enter first name");
    }
    else if (empt1 != "" && empt2 == "") {
```

pulldef

```
        alert ("Enter Last name");
    }
}
</script>
</body>
</html>
```

Ans. 2

```
<html>
<head>
  <title> Student Registration form </title>
</head>
<body>
  <form action = "<? php $_PHP_SELF ?>" method = "post">
  Name:
  <input type = "text" name = "txtname">
  <br><br>
  ROLL NO:
  <input type = "text" name = "Rollno">
  <br><br>
  COURSE:
  <input type = "text" name = "course">
  <br><br>
  Address:
  <textarea name = "add" type = "textarea"></textarea>
  <br><br>
  <input type = "Submit" name = "insert" value = "Submit">
  <input type = "Reset" value = "Reset">
</form>
</body>
</html>
```

```
<?php
if(isset($_POST['insert']))
{
    $con = mysql_connect("localhost", "root", "");
    if($con)
        echo "Mysql connection successful <br>";
        mysql_select_db("studinfo", $con);
        $name = strval($_POST['txtname']);
        $rollno = intval($_POST['Roll_no']);
        $course = strval($_POST['course']);
        $address = strval($_POST['add']);

    $insert = "insert into info values('$name', '$rollno'
                                        '$course', '$address')";
if(mysql_query($insert, $con))
    {
        echo "Data inserted succesfully <br>";
}
$query = "select * from info";
$sldt = mysql_query($query, $con);

echo "<table border='2'>
<tr>
        <th>Name</th>
        <th>Roll No</th>
        <th>Course</th>
        <th>Address</th>
</tr>";
while($row=mysql_fetch_array($sldt))
{
    echo"<tr>";
```

```
echo "<td>".$row['name']."</td>";
echo "<td>".$row['rollno']."</td>";
echo "<td>".$row['course']."</td>";
echo "<td>".$row['address']."</td>";
echo "</tr>"
}

echo "</table>";
mysql_close($con);
}
}
?>
```

Ans. data <- read.csv("input.csv")
print (data)

O.P

	id	name	salary	join_date	department
1	1	Aman	5000	01-01-2018	IT
2	2	Ayush	8000	10-11-2019	HR
3	3	Deepak	3000	5-7-2020	IT
4	4	Ram	10000	17-2-2015	Finance
5	5	Karan	7000	4-3-2017	HR

print (ncol(data)) # number of columns
print (nrow(data)) # number of rows

OP [1] 5a
[1] 5

sal ← max(data$salary) # maximum salary
print (sal)

O.P [1] 10000

retval ← subset(data, salary == max(salary))
print (retval) # data of max salary person

O.P

	id	name	salary	join_date	department
4	4	Ram	10000	17-2-2015	finance

retval ← subset(data, dept == "IT")
print (retval) # details of IT workers

Kuldeep

O.P

	id	name	salary	join_date	dept
1	1	Aman	5000	1-1-2018	IT
3	3	Deepak	3000	5-7-2020	IT

```
retval <- subset(data, as.Date(join_dat) > as.Date
                                ("20-5-2018"))
print(retval)   # person with joining date after 20-5-2018
```

O.P

id	name	salary	join_date	dept
2	Ayush	8000	10-11-2017	HR
3	Deepak	3000	5-7-2020	IT

```
mean(data $ salary)   #finding mean
```

O.P 6600

```
median(data $salary)   # finding median
```

O.P 7000

Ans 4. Descriptive statistics

It is used to describe the characteristics or features of a data set.

1. Distribution

It shows us the frequency of different outcomes

distribution of department in our data

IT : 2
HR : 2
Finance : 1

2 Central tendency

- Mean of salary in our data : 6600
- Median of salary in our data : 7000
- Mode can't defines because all values are different.

3. Variability

- Standard deviation :- count N : 5
  sum, ΣX : 33000
  Mean, μ : 6600
  Variance, σ^2 = 5840000

Steps

$$\sigma = \sqrt{\frac{1}{N}\sum_{i=1}^{N}(x_i-\mu)^2}$$

$$\sigma = \frac{\Sigma(x_i-\mu)^2}{N}$$

$$= \frac{(5000-6600)^2 + \ldots + (7000-6600)^2}{5}$$

$$= \frac{29200000}{5}$$

$$= 5840000$$

$$\sigma = \sqrt{5840000}$$

$$= 2416.6091$$

- Min & Max value : 3000 & 10000
- Range : 7000
- kurtosis : -0.661178
- skewness : -0.182523

Inferential statistics

It focus on making generalizations about a larger population based on a representative sample of that population. Because it focuses on making predictions its results are usually in the form of probability

To understand inferential statistics, we have to have basic knowledge about the following topics

- The basic difination of probability
- The multiplication rule of probability
- The addition rule of probability
- nCr (Combination)

- mean of sample : 5000, 7000, 6000
  - 6666.66

median - 7000

so we can say the sample of the population is pretty much defines the popution.