Ans 1→

```
<!DOCTYPE HTML>
<html>
<head>
<script>
function validate ( ){
    var x =
document. forms ["Myform"] ["fname"]. value;
if (x == "" || x == null) {
  alert ("Name must be filled out");
    return false;
    }
  }
</script>
</head>
</body>
```

<h2> Java Script validation for empty input field </h2>
<P> try to submit the form without entering any text. </P>

```
< form name = "My form" action = "/action_page . php"
                    on submit = " return validate ()"
                    method = "Post" required >
Name : <input type = "text" name = "fname">
       <input type = "submit" value = "Submit">
</ form>
</ body>
</ html>
```

Ankita Dabral

Ans 2>

```
<html>
<head>
<title> Student Registration form </title>
</head>
<body>
<h2> Student Registration form </h2>
<form action = "Submit.php" method = "POST">
<input type = "text" name = "Student First Name"
value = "" Place holder = "Student
First Name"> <br/>
<input type = "text" name = "Student last name" value = ""
place holder = "student last Name"> <br/>
<input type = "text" name = "father's Name" value = ""
placeholder = "father's Name"> <br/>
<input type = "text" name = "Mother's Name" value = ""
place holder = "Mother's Name"> <br/>
<input type = "date" name = "DOB" value = "" placeholder =
"DOB"> <br/>
<input type = "tel" name = "Mobile Number" value = ""
placeholder = "Mobile Number"> <br/>
<input type = "Submit" name = "Submit">
</form>
</body> </html>
```

Submit PHP

```
<!DOCTYPE html>
<html>
<head>
```

Ankita Jaiswal

```
<title> Registration_form </title>
</head> <body>
<h2> thankyou for submitting the form </h2>
<!-- Getting the output form the form value provided through
'form.php' -->
Student's first Name : <?php echo $_POST['Student_first Name']
?><br/>
Student's Last Name : <?php echo $_POST['student Last Name']
?><br/>
Student's father's Name : <?php echo $_Post['father's Name']?>
<br/>
Student's Mother's Name : <?php echo $_POST['Mother's Name']?>
<br/>
Student's Date of Birth : <?php echo $_POST['DoB']?><br/>
Student's Mobile Number : <?php echo $_POST['Mobile Number']
?><br/>
</body>
</html>
```

Name → Ankita Dabral Univ. Roll No. → 2101030 Course → MCA-1C ①
Class Roll No. → 62 Subject - Statistical & data analysis using R.

Ans3 → Reading a CSV file → reading a csv file available in your current working directory

```
data <- read.csv("Employee.csv")
print(data)
```

When we execute the above code it produces the following:

	id	name	Salary	start_date	dept.
1	1	Rick	623.30	2012-01-01	IT
2	2	Dan	515.20	2013-09-23	operations
3	3	Michell	611.00	2014-11-15	IT
4	4	Ryan	729.00	2014-05-11	HR
5	5	Gary	843.25	2015-03-24	finance
6	6	Nina	578.80	2013-05-21	IT
7	7	Simran	632.80	2013-07-30	operations
8	8	Guru	722.50	2014-06-17	finance

Analyzing the CSV file → By default the read.csv() fn gives the output as a data frame.

```
data <- read.csv("Employee.csv")
print(is.data.frame(data))
print(ncol(data))
print(nrow(data))
```

output

```
[1] TRUE
[1] 5
[8] 8
```

Ankita Dabral

the person with max salary ⇒

```
sal <- max(data $ salary)   # Get the max salary from
                              data frame.
retval <- subset (data, salary == max(salary))
  Print (retval)
                            # Get the person detail having
                              max. salary
```

Output

id	name	salary	start date	dept
5	~~Gaur~~ Gaur	843.25	2015-03-27	finance

all the people working in IT department

```
retval <- subset (data, dept = "IT")
  Print (retval)
```

Output

	Id	name	salary	start date	dept.
1	1	Rick	623.3	2012-01-01	IT
3	3	Michelle	611.0	2014-11-15	IT
6	6	Nina	578.0	2013-05-21	IT

Anita Gaur

(Ans 4) Descriptive statistics

Summary → Gives us the descriptive stats like

In case of Numerical data :-

gives mean, median, Range

Measure of Central Tendency -

= mean (employee $ salary)

6 56.88125 [an average person spent $ 656.88125 salary]

= mode (employee $ dept) [most common dept employee table]

= median (employee $ salary)

7291.00

Measure of spread

range (employee $ salary)

512.20 8433.25

=> var (employee $ salary)

1469.437

=> sqrt Var (employee $ salary)

32.3584

Inferential Statistics

→ Hypothesis testing →

data <- subset (employee, Employee $ salary == 1)

```
test 2 - function (a, b, n) {
    sample mean = mean(a)
    pop-mea = mean(1)
    c = nrow(n)
    var.b = var(a)
    zeta = (sample_mean - pop-mean) / sqrt(var.b/c))
    return zeta,
}
```