Name → Gaurav University Roll No → 2101069 Student ID → 21711152

Course → MCA Semester → I Sec → C Klass Roll → 14

Subject → End-term Practical Exam → PMC-103

(Ans 2 →)

```
<!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> Javascript 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"
                onsubmit = " return validate()"
                method = "post" required>
Name: <input type = "text" name = "fname">
      <input type = "Submit" value = "Submit">
</form>
</body>
</html>
```

Name: Gaurav
Student ID: 21711152

Ans 2 ⇒)

```
<!DOCTYPE html>
<html>
  <head>
    <title> Student Registration </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 = "Fathers Name" value = "" ~~place~~
        place holder = "Fathers's Name"> <br/>
<input type = "text" name = "Mothers Name" value = ""
        Place holder = "Mother's Name"> <br/>
<input type = "date" name = "DOB" value = "" place holder =
        "DOB"> <br/>
<input type = "tel" name = "Mobile Number" value = ""
        place holder = "Mobile Number"> <br/>
<input type = "Submit" name = "Submit">
  </form>
  </body>
</html>
```

Submit.PHP

Name → Gaurav

Student Id → 21911152

```
<!DOCTYPE html>
<html>
  <head>
    <title> Registration Form </title>
  </head>
  <body>
    <h2> thank you 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 ~~First~~ Last Name : <?php echo $_POST['Student Last Name']
                                        ?> <br/>
Student's Father's Name : <?php echo $_POST['Fathers Name']?>
                                        <br/>
Student's Mother's Name : <?php echo $_POST['Mothers Name']?>
                                        <br/>
Student's Date of Birth : <?php echo $_POST['DOB']? > <br/>
Student's Mobile Number : <?php echo $_POST['Mobile Number']
                                        ?> <br/>
  </body>
</html>
```

(Ans 3 →)

Name → Gaurav
Student ID → 2171152

~~data <- read~~

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 | Michelle | 611.00 | 2014-11-15 | IT |
| 4 | 4 | Ryan | 729.00 | 2014-05-11 | HR |
| 5 | NA | Gary | 843.25 | 2015-03-27 | Finance |
| 6 | 6 | Nina | 578.00 | 2013-~~07-30~~ 05-21 | IT |
| 7 | 7 | Simon | 632.80 | 2013-07-30 | operations |
| 8 | 8 | Guru | 722.50 | 2014-06-17 | Finance |

Analyzing the CSV file → By default the read.csv() function 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
[1] 8
```

Nancy Gaurav
Student ID: 21711152

the person with max salary ⇒

```
Sal <- max (data $ salary)   # Get the max Salary
                               from data Frame.

retval <- Subset (data, salary == max (salary))
                               # Get the person detail
print (retval)                   having max Salary
```

output →

| | id | name | salary | start_date | dept |
|---|---|---|---|---|---|
| 5 | NA | Gary | 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 |

Name: Gaurav
Student ID: 217118

Get the persons in IT department whose Salary is greater than 600

```
info <- subset (data, salary > 600 & dept == "IT")
print (info)
```

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 |

Get the ~~pep~~ people who joined on or after 2014

```
retval <- subset (data, as.Date (Start_date) > as.Date
                                ("2014-01-01"))
print (retval)
```

output:

| | Id | name | Salary | start_date | dept |
|---|---|---|---|---|---|
| 3 | 3 | Michelle | 611.80 | 2014-11-15 | IT |
| 4 | 4 | Ryan | 729.80 | 2014-05-11 | HR |
| 5 | NA | ~~Gro~~ Gary | 843.25 | 2015-03-27 | Finance |
| 8 | 8 | Gurun | 722.50 | 2014-06-17 | Finance |

Name → Gamal
Student ID: 21711152

(Ans → 4 ⇒) Descriptive Statistics

Summary → Gives us the descriptive stats like

In Case of Numerical data :—

Gives Mean, mode Median, Range

Measure of Central Trendency ⇒

= mean ( ~~Employee~~ Employee $ Salary)

~~5,155.05~~

656.88125

[an average person spent $ 656.88125 ~~to buy~~ ~~the~~ Salary)

= mode ( Employee $ dept) [most common dept in Employee table]

= 3

= median ( Employee $ salary)

729.00

Measure of Spread :

range ( Employee $ Salary)

515.20 . 843.25

⇒ Var ( Employee $ Salary)

1469.437

⇒ Sqrt Var ( Employee $ Salary)

32.3584.

Name: Gaurav
Student ID: 2171115

# Inferential Statistics:

## → Hypothesis Testing! :

```
data <- subset (Employee, Employee$ ~~salary~~ dept
                                    Salary ==1)

test 2 - 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.
```