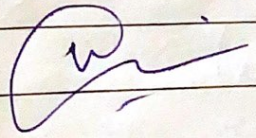
Ans. 1.

```
<html>
<head>
<script>
function validate() {
var x = document.forms["myform"]["name"].value;
if (x == null || x == "")
{
alert("Name must be filled out");
return false;
}
var y = document.forms["myform"]["password"].value;
if (y == null || y == "")
{
alert("Password must be filled out");
return false;
}
var z = document.forms["myform"]["email"].value;
if (z == null || z == "")
{
alert("Email must be filled out");
return false;
}
}
</script>
</head>
```

```
<body>
<form name="myform" onsubmit="return validate()">
Name*: <input type="text" name="name"> <br>
Password*: <input type="password" name="password"> <br>
Email*: <input type="text" name="email"> <br>
<input type="submit" value="submit">
</form>
</body>
</html>
```

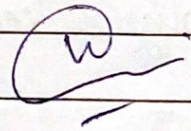


Ans. 2.

```
<html>
<head>
<script>
function display()
{
document.getElementById("displayarea").innerHTML = document.
getElementById("s_id").value;
document.getElementById("s_id").value = "";
document.getElementById("displayarea1").innerHTML = document.getElemnt
-ById("s_name").value; document.getElementById("s_name").value = "";
document.getElementById("displayarea2").innerHTML = document.getElementById
("course").value; document.getElementById("course").value = "";
document.getElementById("displayarea3").innerHTML = document.getElementById
("mob").value; document.getElementById("mob").value = "";
}
</script>
</head>
<body>
<table bgcolor = "#FF00FF" border="1" align = "center">
<tr>
<td> Student Id </td>
<td> <input type = "text" name = "s_id" id = "s_id"></td>
</tr>
```

```
<tr>
<td> Student Name </td>
<td> <input type="text" name="s_name" id="s_name"> </td>
</tr>
<tr> <td> Course </td>
<td><input type="text" name="course" id="course"></td>
</tr>
<tr>
<td> Mobile_Number </td>
<td><input type="number" name="mob" id="mob"></td>
</tr>
<tr>
<td>   </td>
<td align="center"> <input type="button" value="submit"
name="submit" id="submit" onclick="display()" /></td>
</tr>
</table>
<table width="400px" align="center" border=0>
<tr style="background-color:#8FBC8F;">
<td align="center"><b> Student_Id </b></td>
<td align="center"><b> Student_Name </b></td>
<td align="center"><b> Course </b></td>
<td align="center"><b> Mobile_Number </b></td>
</tr>
<tr>
```

<td align="center"> </td>
<td align="center"> </td>
<td align="center"> </td>
<td align="center"> </td>
</tr>
</table>
</body>
</html>



Ans. 3. · A Dataset on the T-20 batting Records.

```
batting <- read.csv("odb.csv")
Batting
dim(batting)
summary(batting)
names(batting)

min(batting$Runs)      # 447
max(batting$Runs)      # 18426

min(batting$HS)        # minimum High Score - 102
max(batting$HS)        # Maximum High Score - 264

min(batting$Mat)       # Minimum Match Played - 33
max(batting$Mat)       # Maximum Match Played - 463

# Pie Chart

runs <- c(head(batting$Runs))
bnames <- c(head(batting$Player))

pie(runs, bnames)

# Sachin Tendulkar is top run scorer.
```

Scatter Plot

```
bnames <- head(batting$Avg)
runs <- head(batting$Runs)

plot(bnames, runs, xlab="Average", ylab="Runs", main="Average
  vs Totals Runs")
```

~~Highest~~ Most Run scorer have avarge of 45.

Box Plot

```
bnames <- head(batting$Ave)
runs <- head(batting$Runs)

boxplot(bnames, runs, data=batting, xlab="Runs", ylab="Average",
main="Average vs Runs")
```

Histogram

```
hist(batting$Avg, xlab="Average")
```

Most of the players have average between 35-40.

Ans. 4 Descriptive statistics aims to describe a chunk of raw data using summary statics, graphs and table. Descriptive statistics are useful because they allow you to understand a group of data much more quickly and easily compared to just staring at rows and rows of raw data values.

Ex:- from dataset taken in Que-3.

batting $ Runs

Min : 1447
1st Qu : 3928
Median : 5964
Mean : 6307
3rd Qu : 8079
Max : 18426

Inferential Statistics uses a small sample of data to draw inferences about the larger population that the sample came from.
It would take too long and be too expensive to actually survey every individual in the country.

Ex: If we want to know the most consumed energy drink by the players we need to go to each player and then collect the data of their favorite drink.