

Computer, Information
Technology and Communication
Second Preparatory
Second Term

Name: _____

Class: _____



Unit One: Web Sites

We will create an interactive webpage through which you can enter your personal data via a form data input elements.

A screenshot of a Windows Internet Explorer browser window. The title bar reads 'Ramses College for Girls - Windows Internet Explorer'. The address bar shows 'J:\Java.html' and the search engine is set to 'Bing'. The page content is a registration form titled 'Registration Form'. The form includes the following fields and options:

- Name:
- Password:
- Confirm Password:
- Age:
- Gender: Male Female
- Proficiency language: English French Germany

At the bottom of the form are two buttons: 'Save' and 'New'.

To create a form and enter your personal data through HTML language, you can use `<form> ... </form>`.

Form:

It is used to add a group of elements to a webpage such as buttons and fields used for data entry in order to send these data for storing.

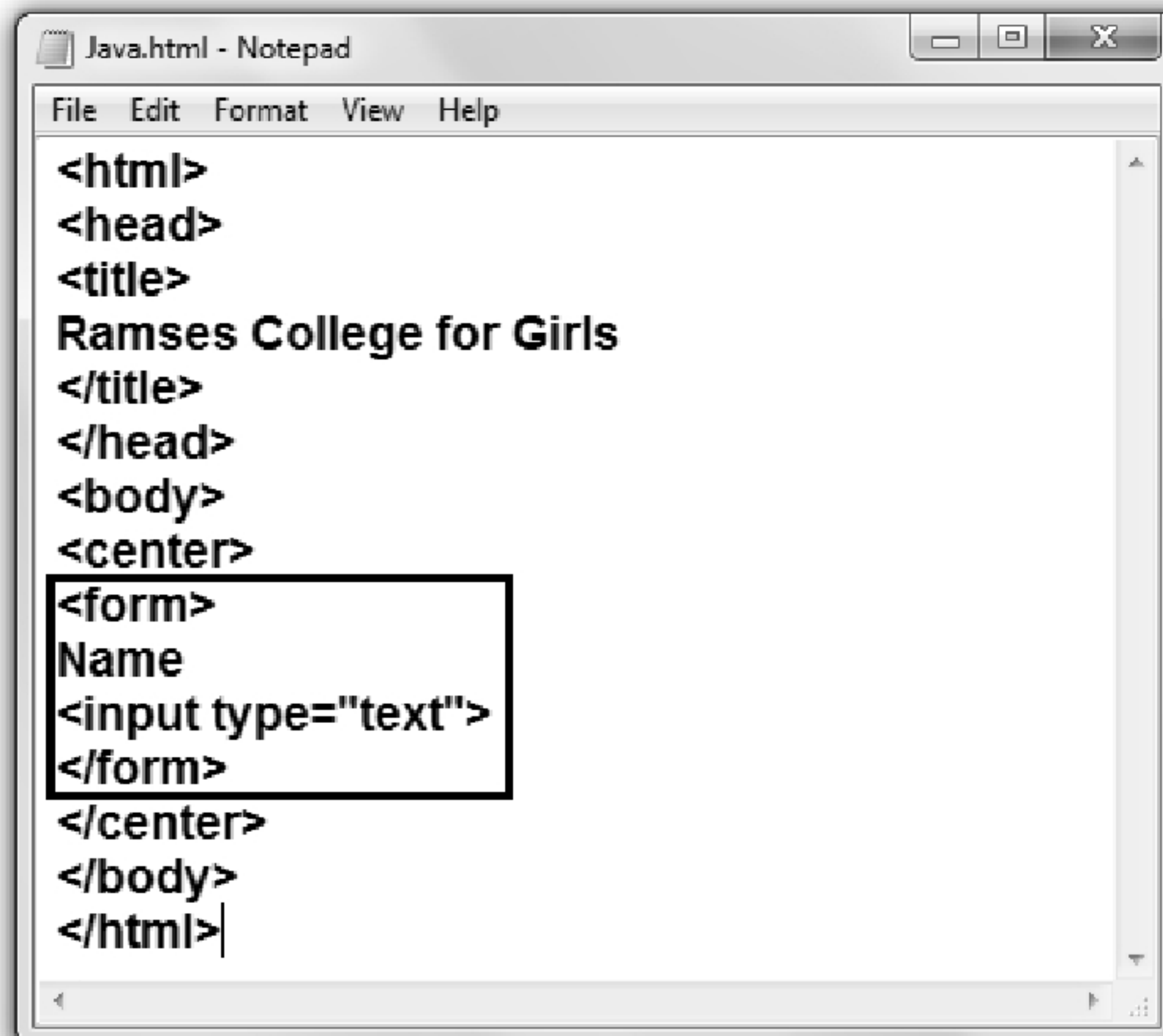
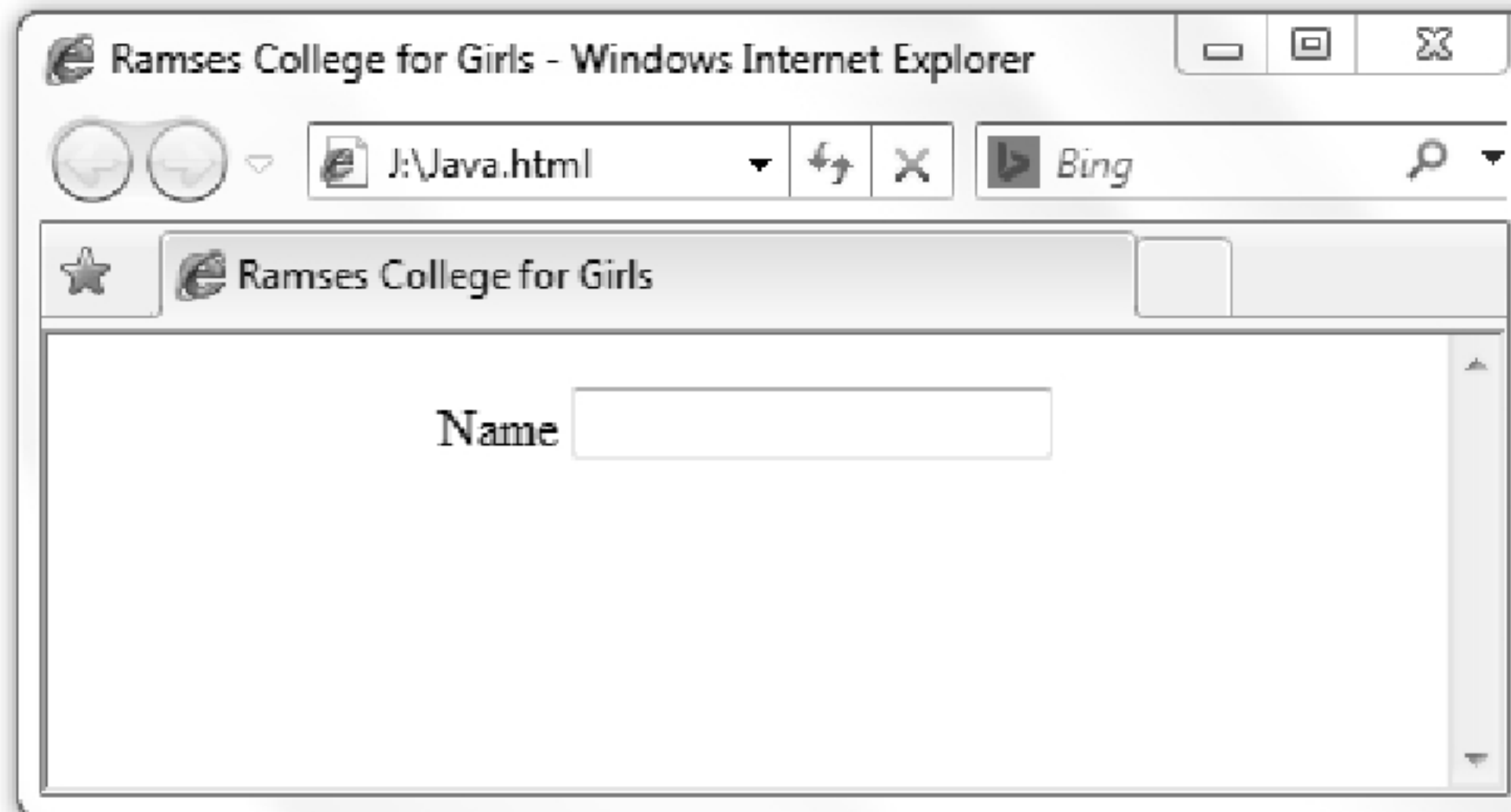
1- To add name field" text box", type the following tag:

```
<input type="text">
```

Textbox is added to give the ability to the user to enter a string or text data via keyboard.

Project 1

Type the "HTML" tags to add a name field as shown in the following figure:



```
Java.html - Notepad
File Edit Format View Help
<html>
<head>
<title>
Ramses College for Girls
</title>
</head>
<body>
<center>
<form>
Name
<input type="text">
</form>
</center>
</body>
</html>
```



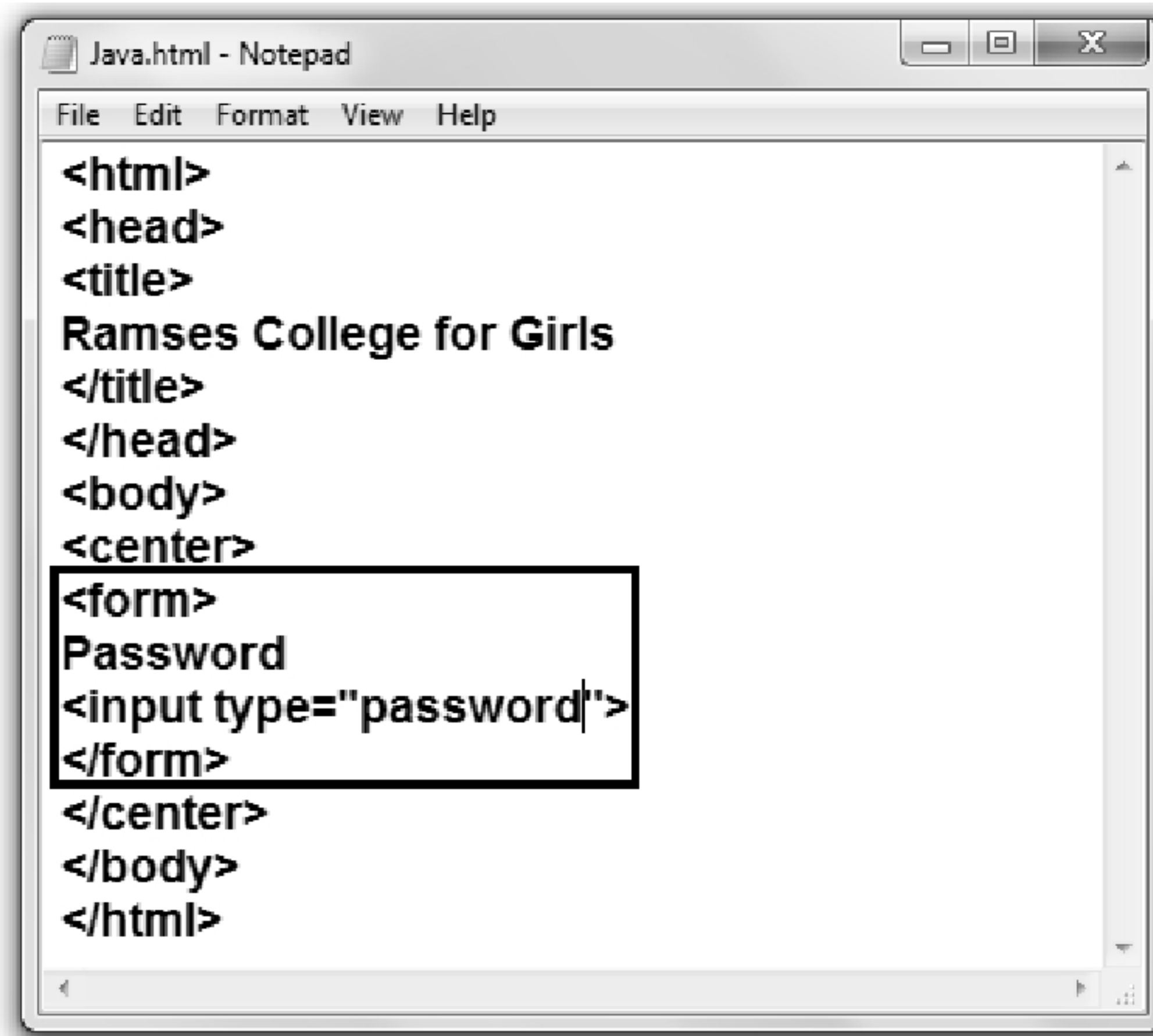
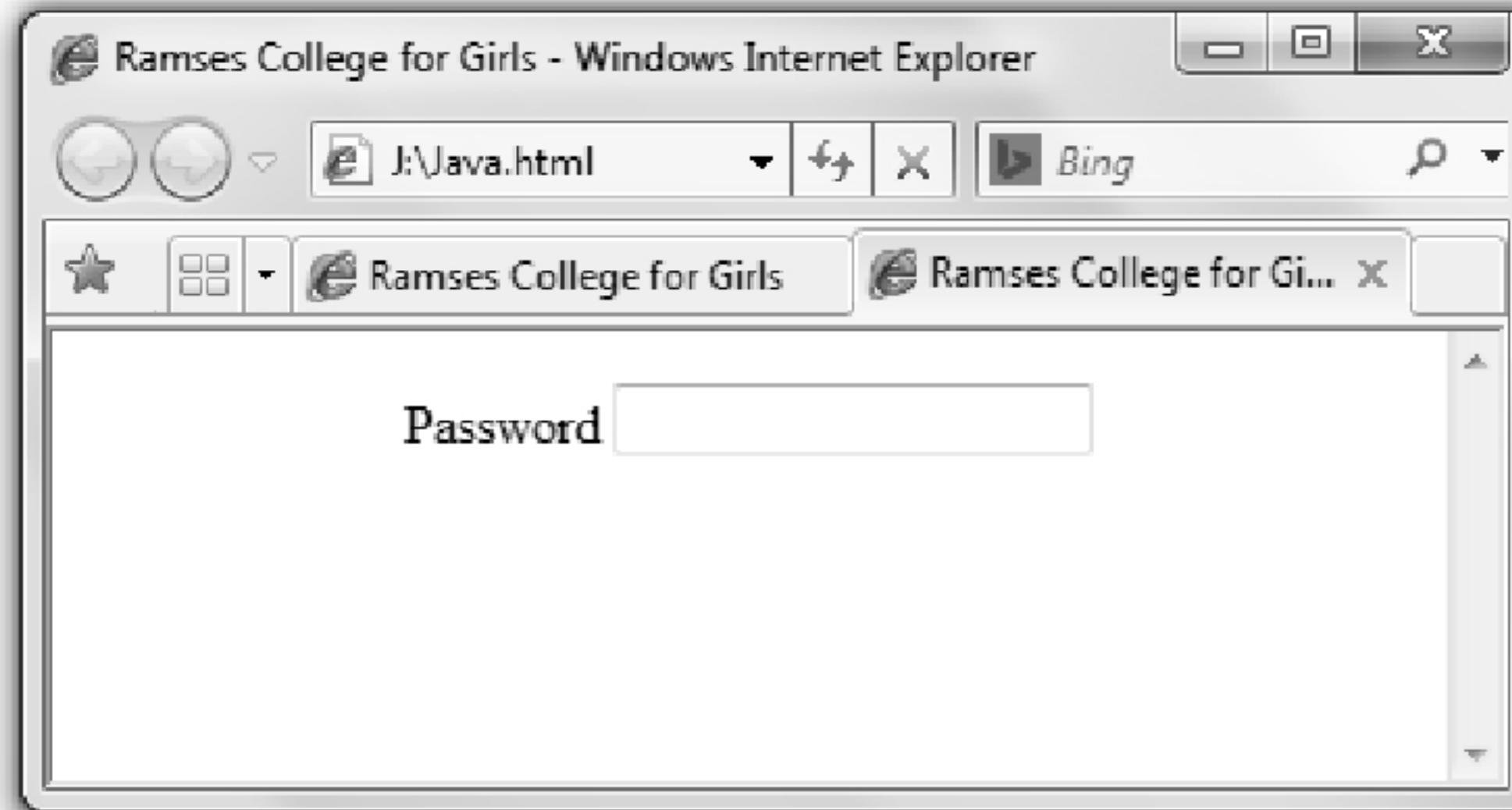
2- To add password field type the following tag:

`<input type = "password">`

(*) symbol will be displayed instead of characters to secure a password key.

Project 2

Type the "HTML" tags to add a password field as shown in the following figure:



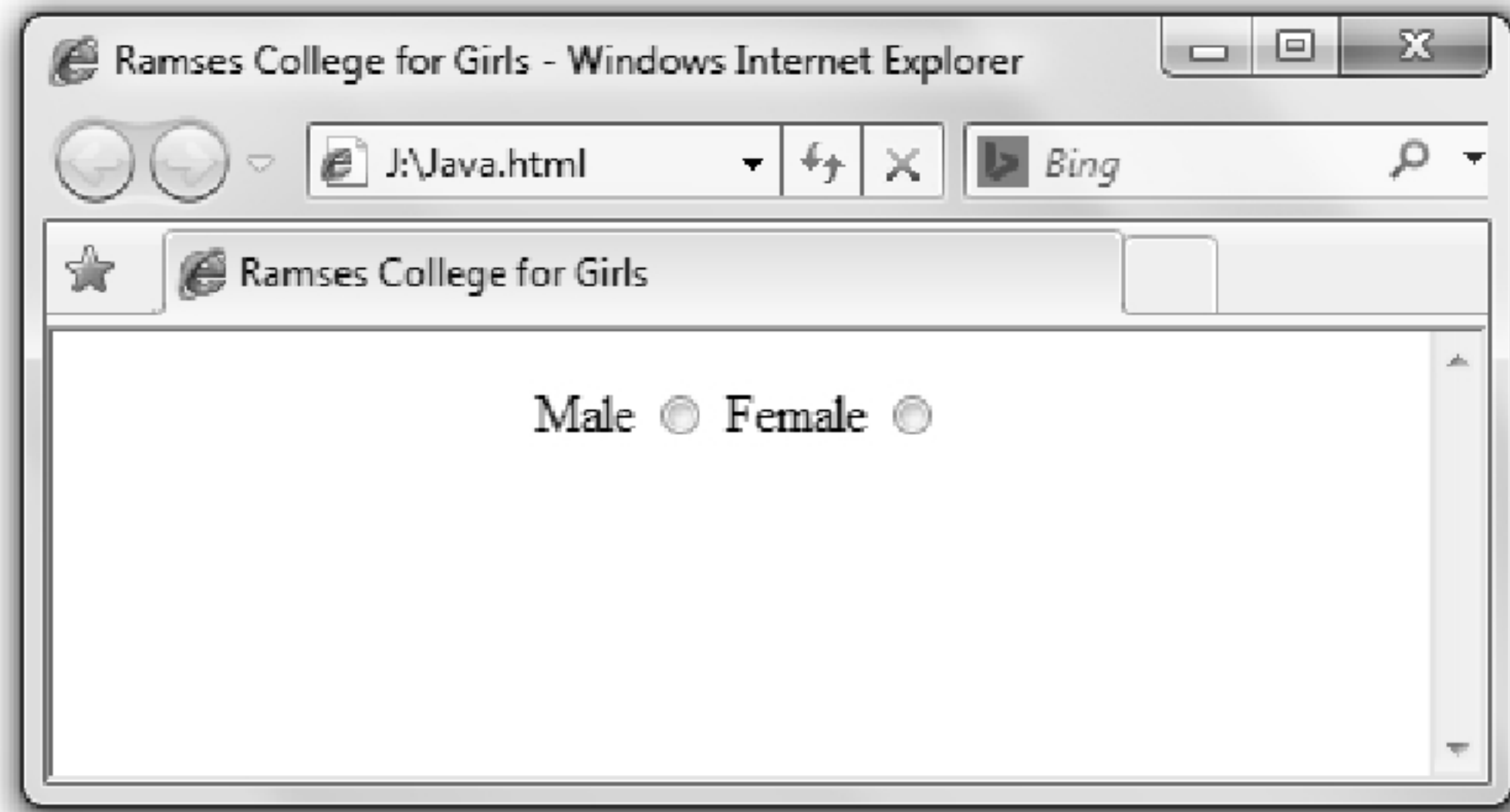
3- To add a radio button field type the following tag:

```
<input type="radio">
```

A radio button field defines a radio button, by which the user can select one of a limited number of options such as your gender (male/female).

Project 3

Type the "HTML" tags to add radio buttons as shown in the following figure:



```
Java.html - Notepad
File Edit Format View Help
<html>
<head>
<title>
Ramses College for Girls
</title>
</head>
<body>
<center>
<form>
Male
<input type="radio" name="a1">
Female
<input type="radio" name="a1">
</form>
</center>
</body>
</html>
```

4- To add a checkbox field type the following tag:

```
<input type="checkbox">
```

By which you can select more than one choice.

Project 4

Type the "HTML" tags to add checkboxes as shown in the following figure:



```
Java.html - Notepad
File Edit Format View Help
<html>
<head>
<title>
Ramses College for Girls
</title>
</head>
<body>
<center>
<form>
Select your proficiency languages
<br>
Arabic
<input type="checkbox">
<br>
English
<input type="checkbox">
<br>
French
<input type="checkbox">
</form>
</center>
</body>
</html>
```

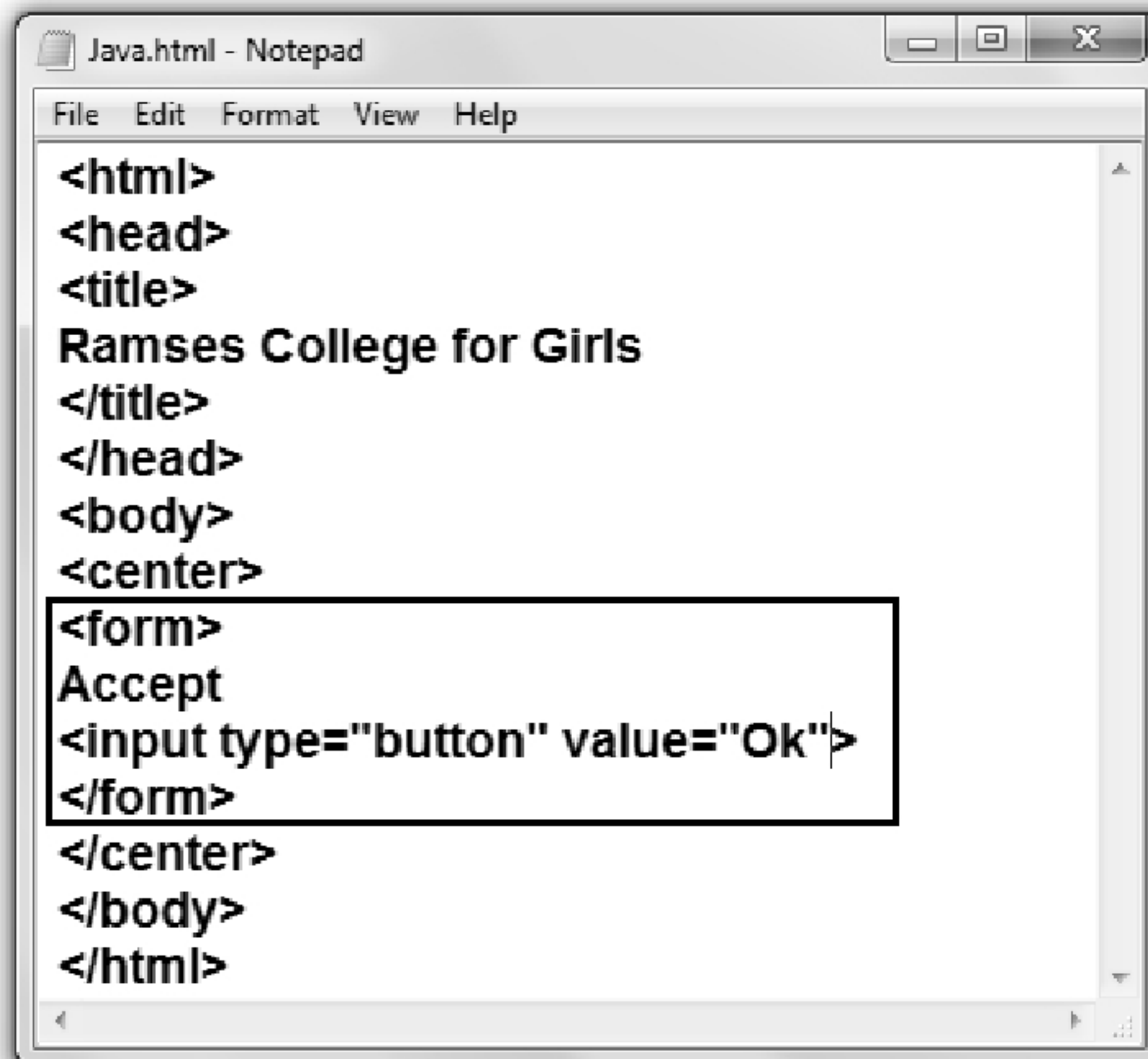
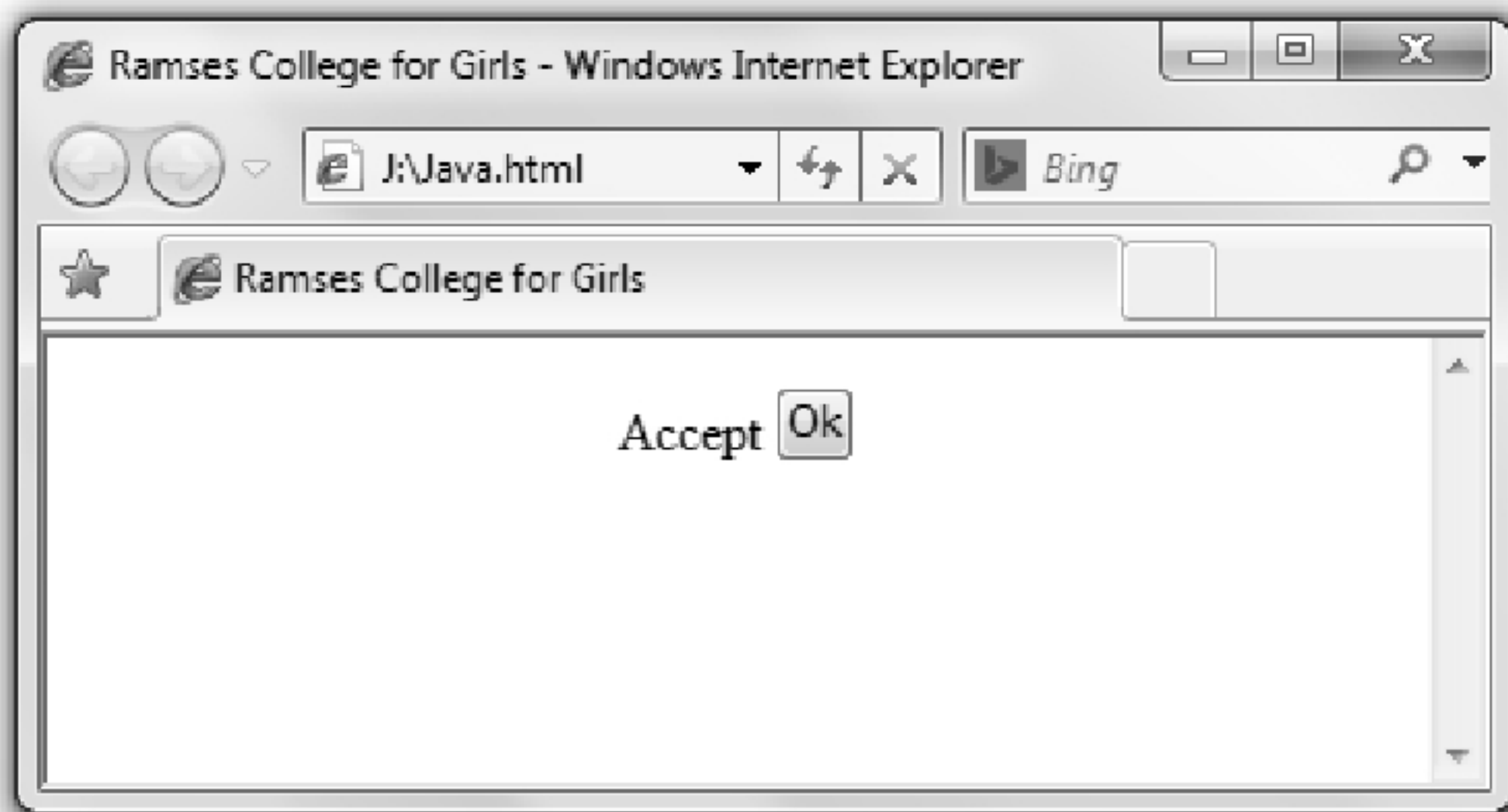
5- To add a button input field type the following tag:

```
<input type="button">
```

The user can click on it to achieve or execute “JavaScript” function such as clear or save entered data within the form.

Project 5

Type the “HTML” tags to add a button as shown in the following figure:



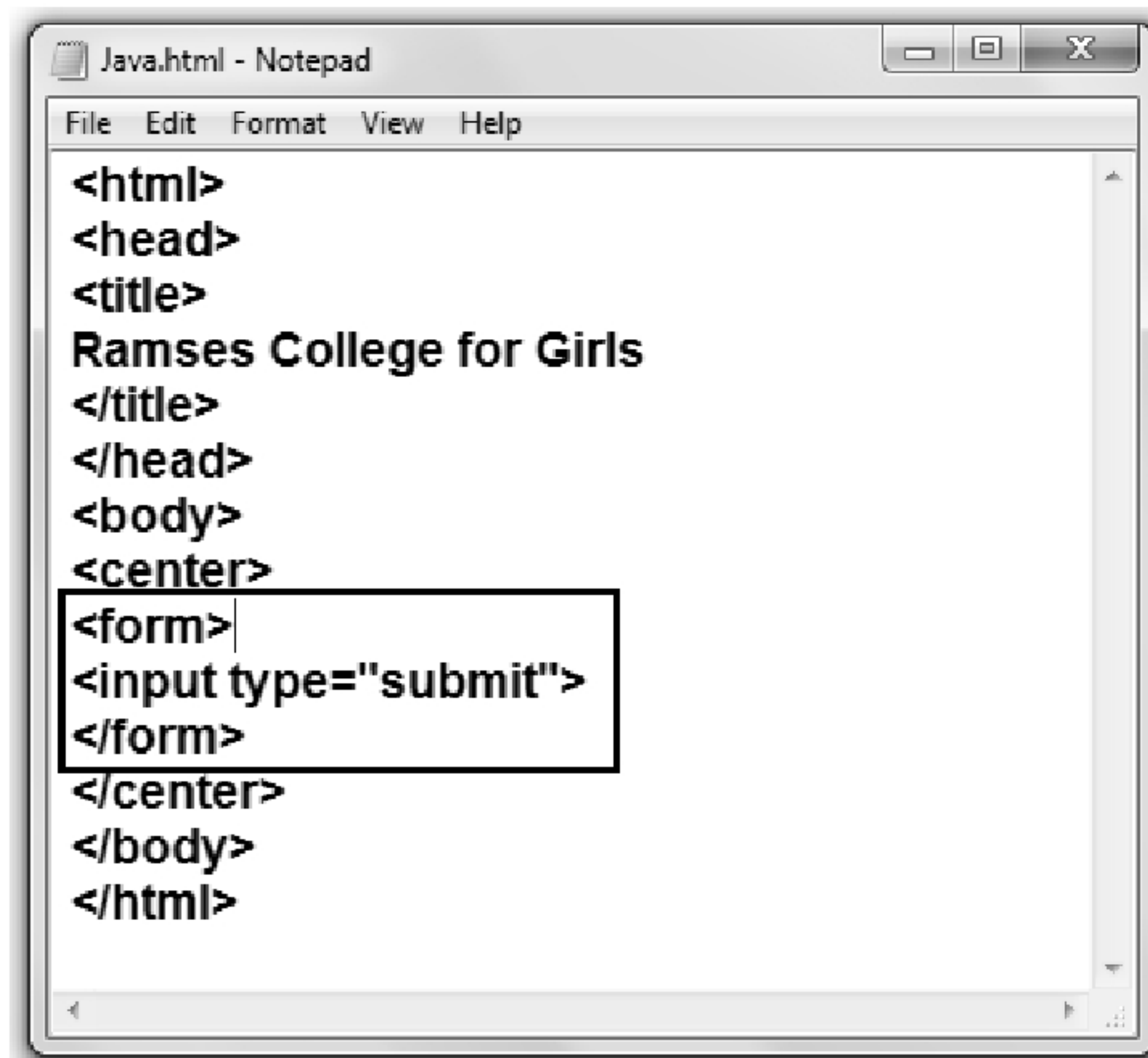
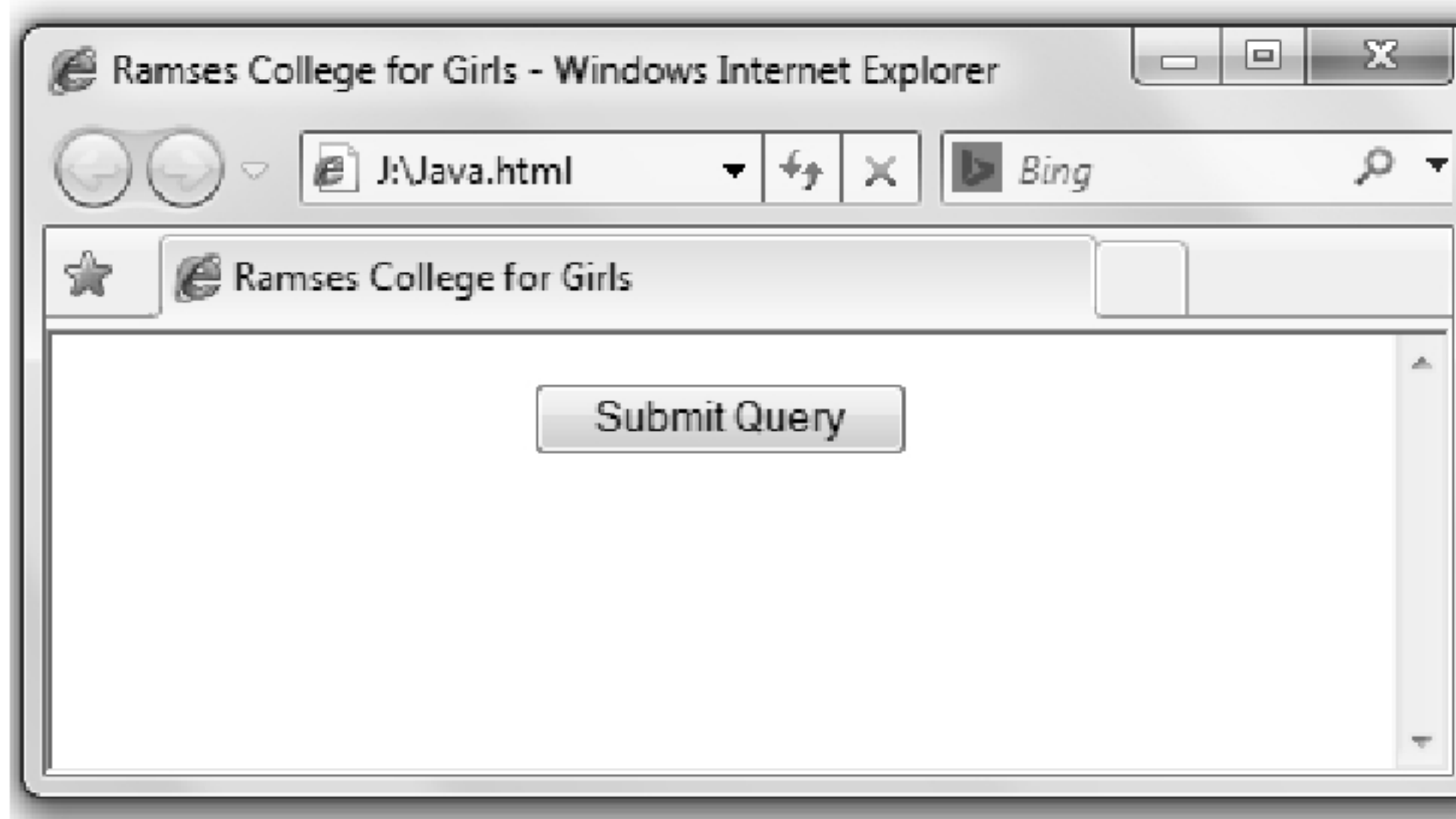
6- To add a submit button type the following tag:

```
<input type = "submit">
```

The user click on it to submit the form data to another webpage assigned by action attribute value of the form.

Project 6

Type the "HTML" tags to add a submit button as shown in the following figure:



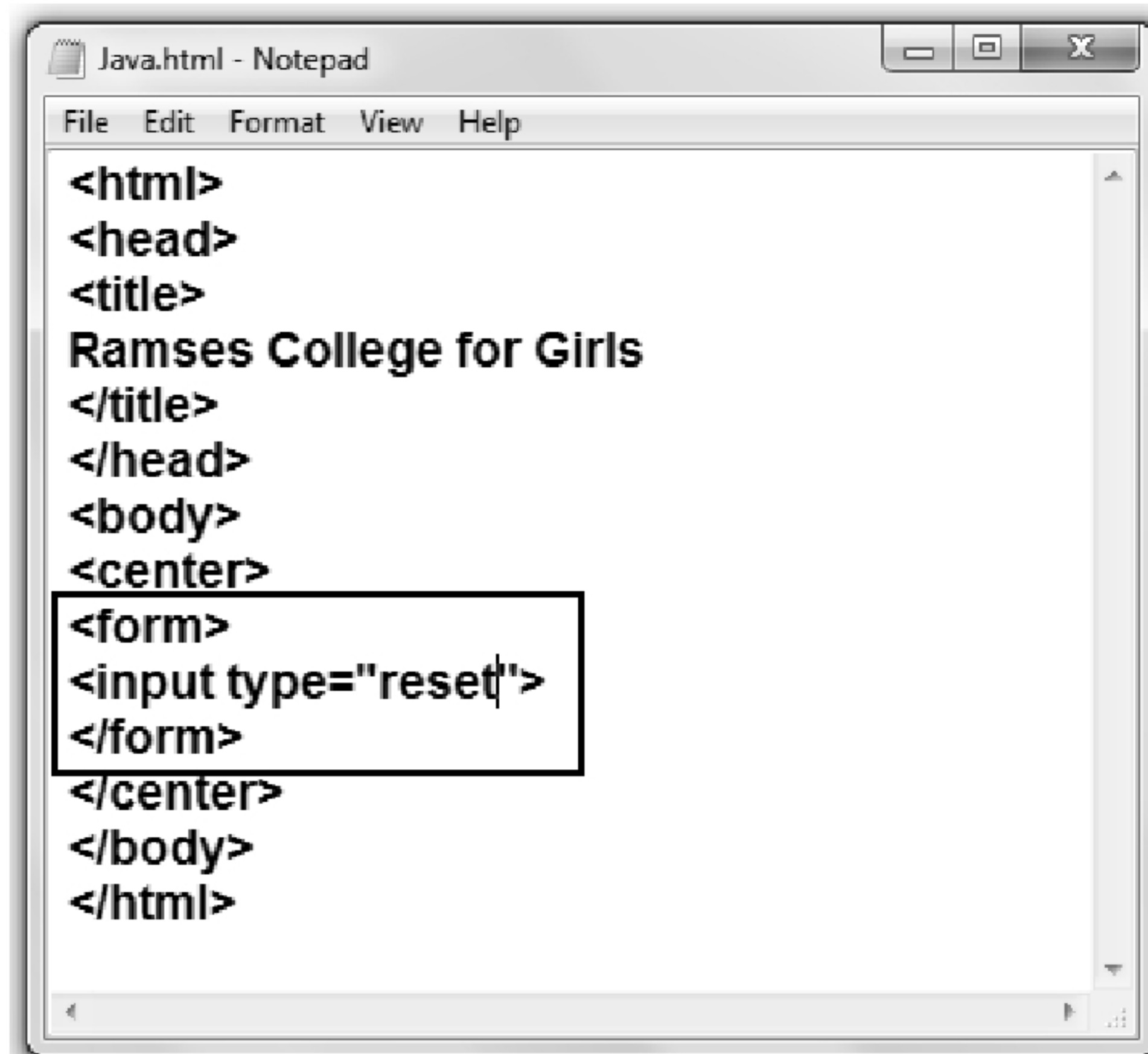
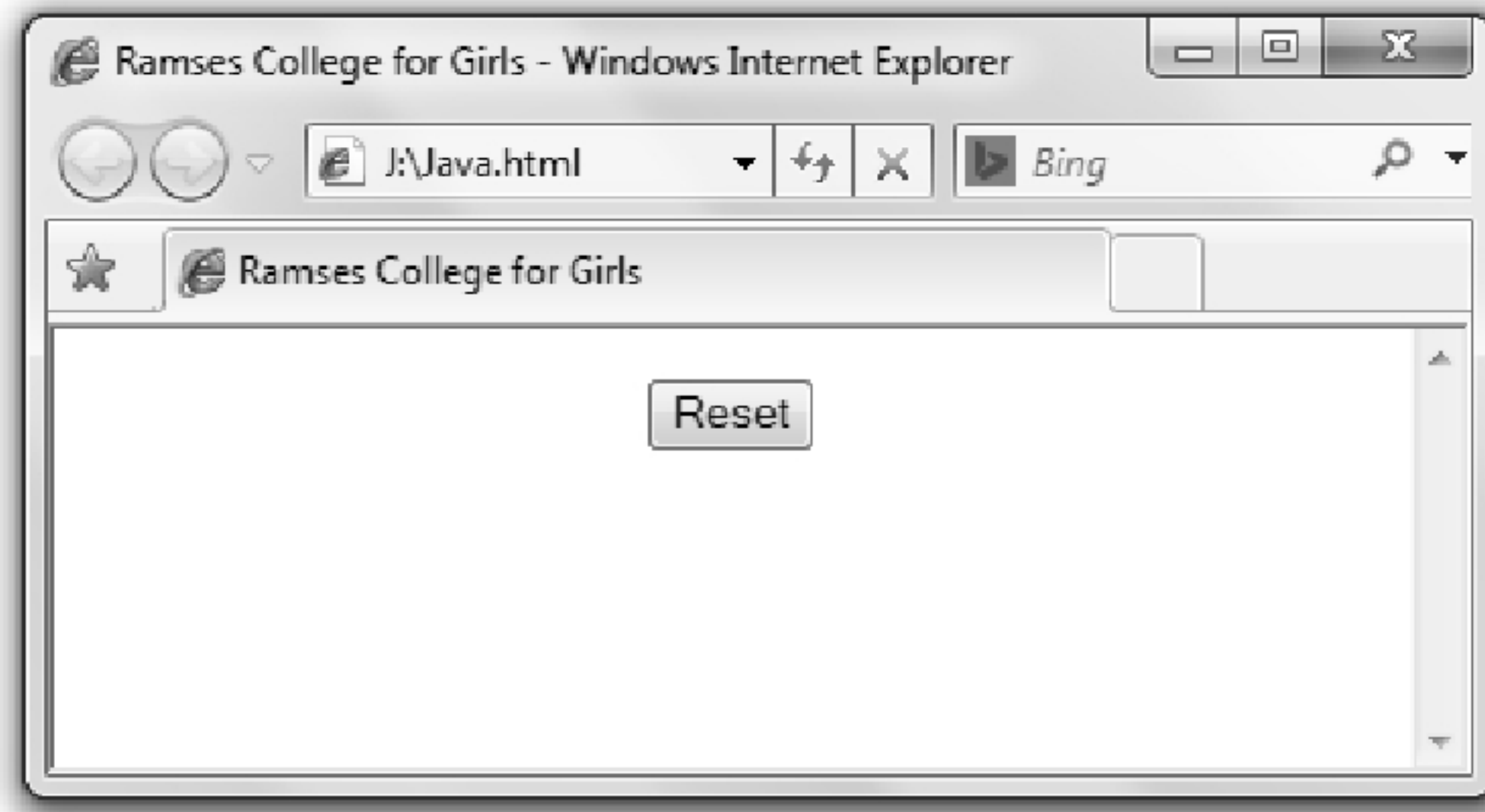
7- To add a reset button type the following tag:

```
<input type = "reset">
```

The user click on it to clear all data fields to its original state.

Project 7

Type the "HTML" tags to add a reset button as shown in the following figure:





Project 8

Design a webpage with a registration data form as shown in the following figure:

The image shows a screenshot of a web browser window titled "Ramses College for Girls - Windows Internet Explorer". The address bar shows "J:\Java.html" and the search engine is "Bing". The browser's address bar also displays "Ramses College for Girls". The main content area of the browser displays a registration form with the following fields and options:

Registration Form

Name

Password

Confirm Password

Age

Gender Male Female

Proficiency language English French Germany

Save New



Q1- Write the scientific term

- 1- When creating a form using “HTML” language, It gives the ability to choose or select only one option from many options.
(-----)
- 2- When creating a form using “HTML” language, The user clicks it to clear all data fields to its original state.
(-----)
- 3- It is used to add a group of elements to a webpage such as buttons and fields used for data entry in order to send these data for storing.
(-----)
- 4- When creating a form using “HTML” language, The user click it to save the form data to another webpage assigned by action attribute value of the Form.
(-----)
- 5- When creating a form using “HTML” language, It is added to give the ability to select more than one choice.
(-----)
- 6- When creating a form using “HTML” language, It is added to give the ability to the user to enter a string or text data via keyboard.
(-----)
- 7- When creating a form using “HTML” language, The user can click on it to achieve or execute JavaScript function such as clear or save entered data within the form.
(-----)
- 8- When creating a form using “HTML” language, The field in which(*) symbol will be displayed instead of characters to secure what is typed.
(-----)



Q2- Match column (A) with column (B)

(A)

- 1- To add a textbox field
- 2- To add a radio button field
- 3- To add a password field
- 4- To add an age input field
- 5- To add a checkbox
- 6- To add a submit or send button
- 7- To add a button
- 8- To add a reset or clear button

(B)

- () <input type= "text">
- () <input type="password">
- () <input type= "radio">
- () <input type= "text">
- () <input type= "submit">
- () <input type= "checkbox">
- () <input type= "reset">
- () <input type= "button">

Model answer:

Q1- **1- Radio button**

2- Reset button

3- Form

4- Submit button

5- Checkbox

6- Text box

7-Button input field

8-Password Field

Q2

(A)

- 1- To add a textbox field
- 2- To add a radio button field
- 3- To add a password field
- 4- To add an age input field
- 5- To add a checkbox
- 6- To add a submit or send button
- 7- To add a button
- 8- To add a reset or clear button

(B)

- (1)<input type= "text">
- (3)<input type="password">
- (2) <input type= "radio">
- (4)<input type= "text">
- (6) <input type= "submit">
- (5) <input type= "checkbox">
- (8) <input type= "reset">
- (7)<input type= "button">



Unit Two: JavaScript Language

To develop an interactive webpage project in order to enter your data and confirm that the entry data is correct, you will need to add “JavaScript” statements to your webpage document. This is because “HTML” language is not enough to achieve that.

JavaScript fundamentals:

- JavaScript commands and instructions are called “Statements”.
- JavaScript commands and instructions (Statements) are written within “HTML” tags.
- JavaScript statements are written inside `<script> ..</script>` tag.
- Each statement must end with a semi-colon (;) character.
- The letter case must be considered, while writing JavaScript statements.

Basics of JavaScript Language

alert() Statement

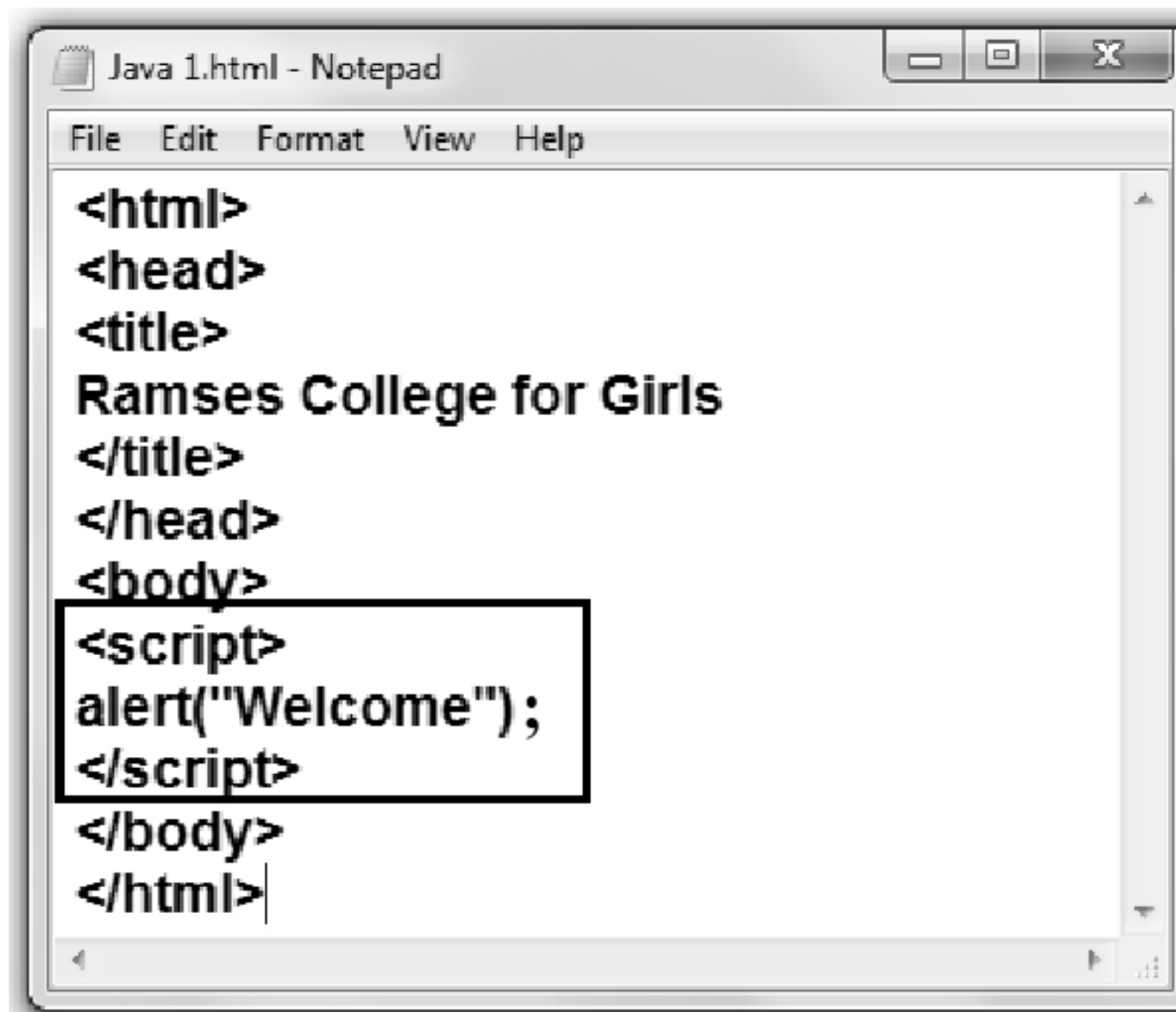
alert() statement is used for displaying a dialogue box with message to the user.

alert("the message");

Notice that, the message must be written within double high quotations.

Project 9

By using "JavaScript" try to design a webpage displays a dialogue box with message "Welcome" on loading.

A screenshot of a Notepad window titled "Java 1.html - Notepad". The menu bar includes "File", "Edit", "Format", "View", and "Help". The text area contains the following HTML code:

```
<html>
<head>
<title>
Ramses College for Girls
</title>
</head>
<body>
<script>
alert("Welcome");
</script>
</body>
</html>
```

The code for the alert statement is highlighted with a black rectangular box.

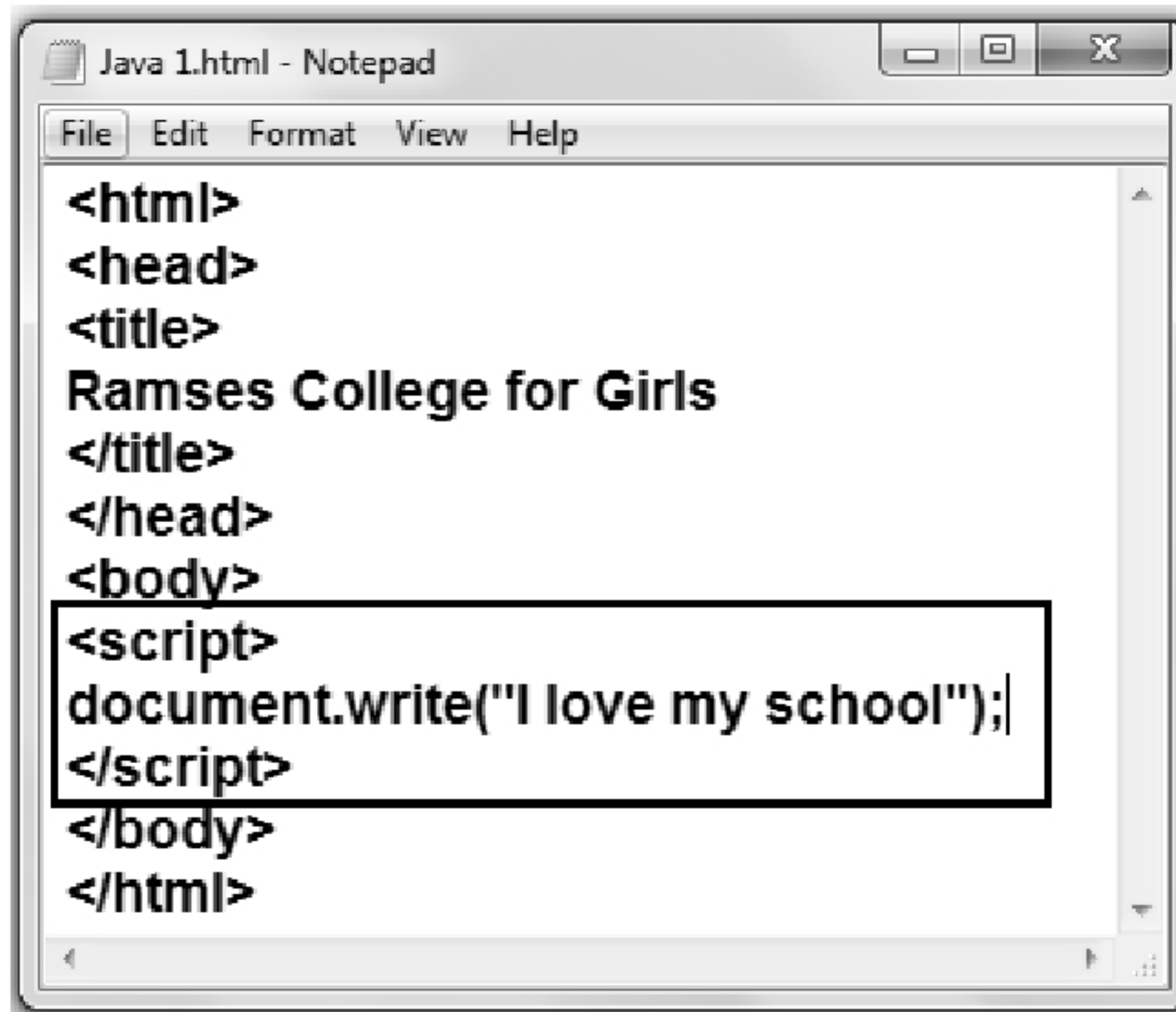
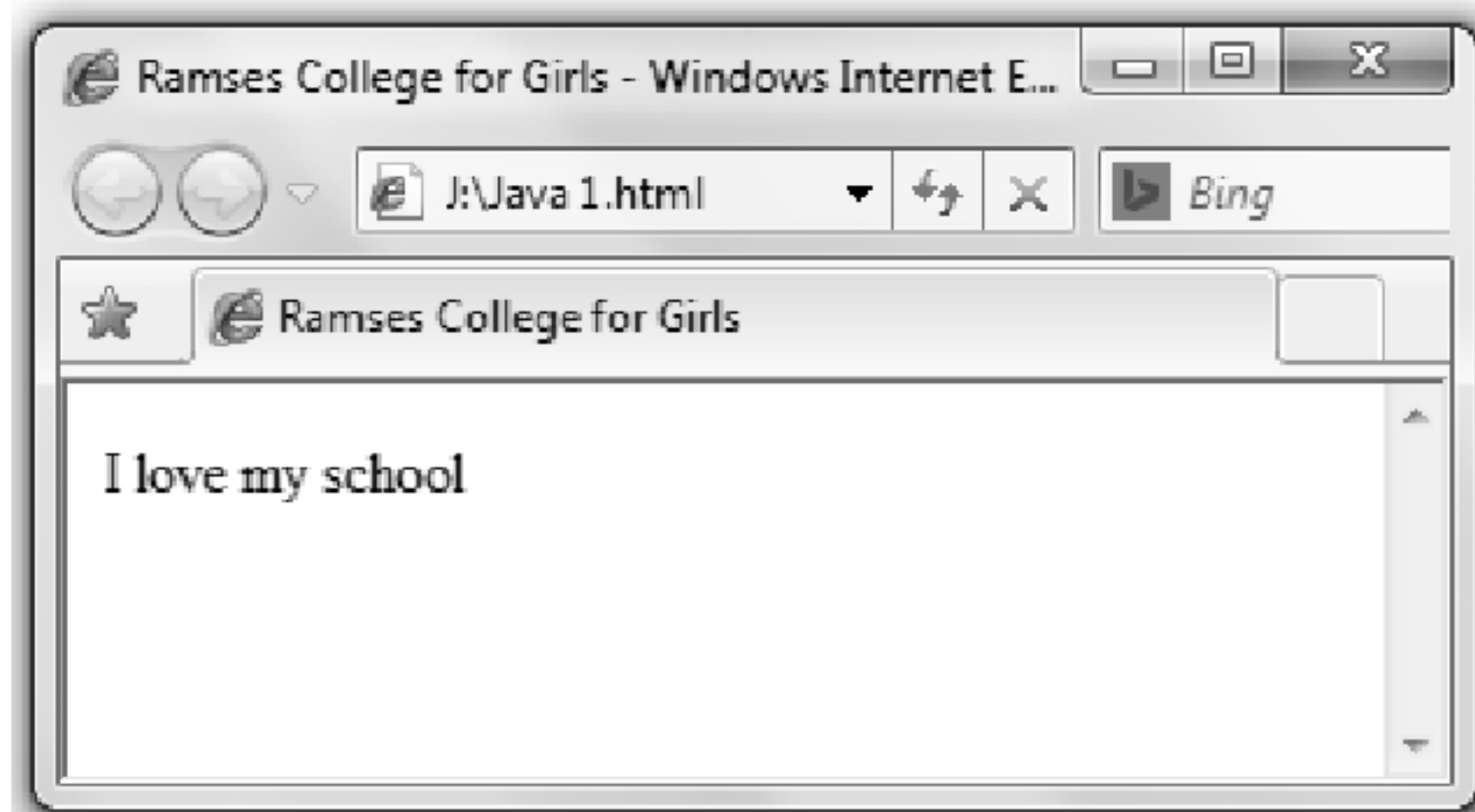


document.write(...) Statement

document.write() statement is used for displaying a text within the webpage contents.

Project 10

By using “Java Script” try to design a webpage displays” I love my school” on the webpage itself.



Calling JavaScript Code

JavaScript statement for calling a function

You noticed that all JavaScript statement within `<script> ...</script>` tag were implemented automatically

If you want the “JavaScript” statement within `<script> ... </script>` tag to be implemented when an event occurs (such as button click), you should learn about a function.

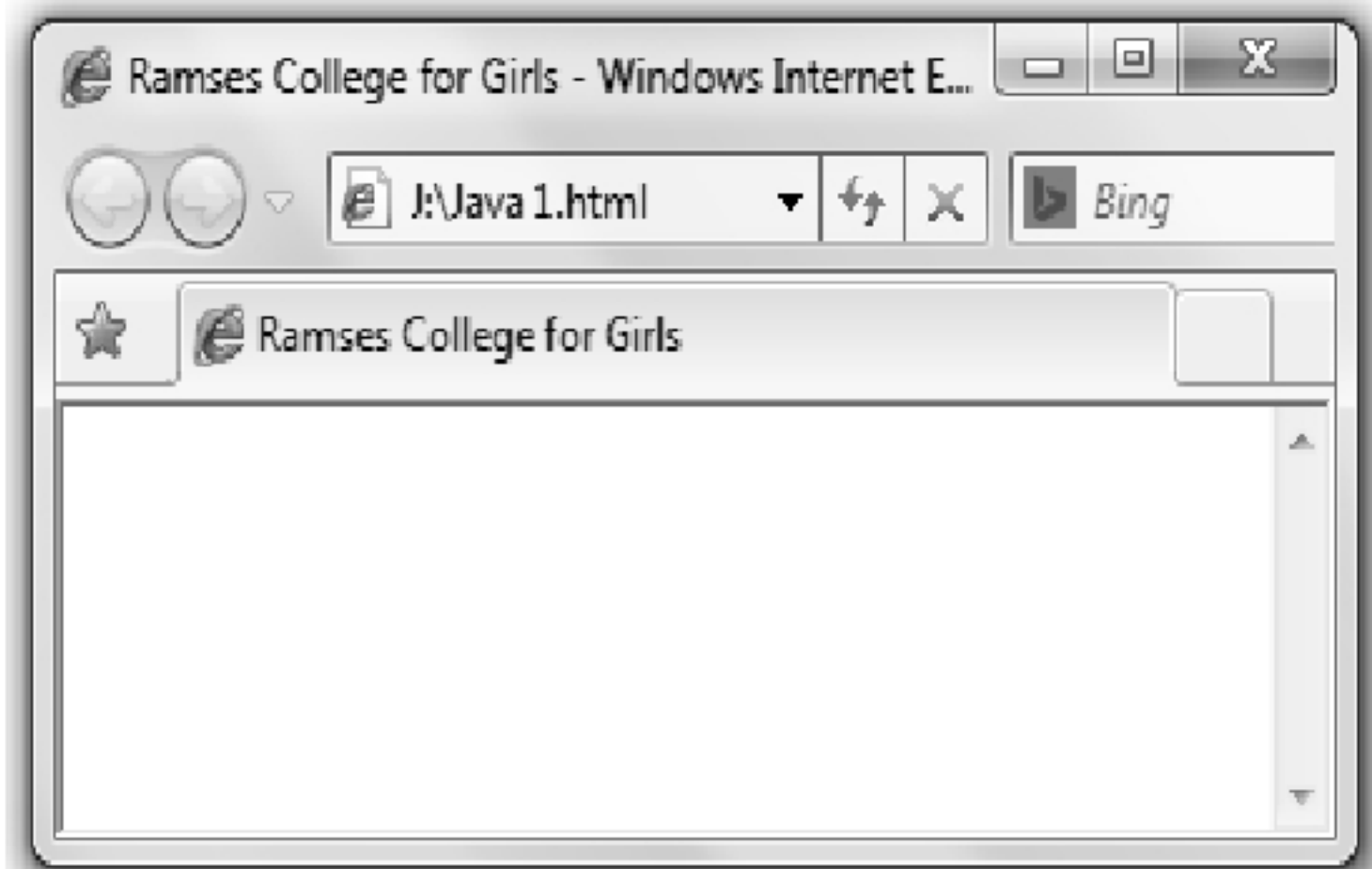
Function is “JavaScript” statements grouped together in a blocked name and implemented when calling it.

Function Creation:

- Write the word “**Function**” followed with its suitable name.
- Write a group of “JavaScript” statements between { ... } curly brackets.



```
Java 1.html - Notepad
File Edit Format View Help
<html>
<head>
<title>
Ramses College for Girls
</title>
</head>
<body>
<script>
function country()
{
alert("Arab Republic of Egypt");
}
</script>
</body>
</html>
```



Notice

- When opening the “HTML” document in an available internet browser, an empty webpage will be shown, because there is not any function called.

To implement any function, first you must call it.



Calling a Function:

To call any function, follow these steps:

- Write an “HTML” tag for displaying a button within webpage.
- Write an "onclick" attribute (event) to this button.
- Write a function name as the value of that attribute (onclick).

As the following:

```
<input type="button"onclick="function name you need to call">
```

Project 11

By using “JavaScript” design a form to create a “Function” and call it by pressing “Click me” button, then a message box containing “Arab Republic of Egypt” will appear.



```
Java.html - Notepad
File Edit Format View Help
<html>
<head>
<title>
Ramses College for Girls
</title>
</head>
<body>
<form name="form1">
<input type="button" value="click me" onclick="f1()">
</form>
<script>
function f1()
{
alert("Arab Republic of Egypt");
}
</script>
</body>
</html>
```

Notice:

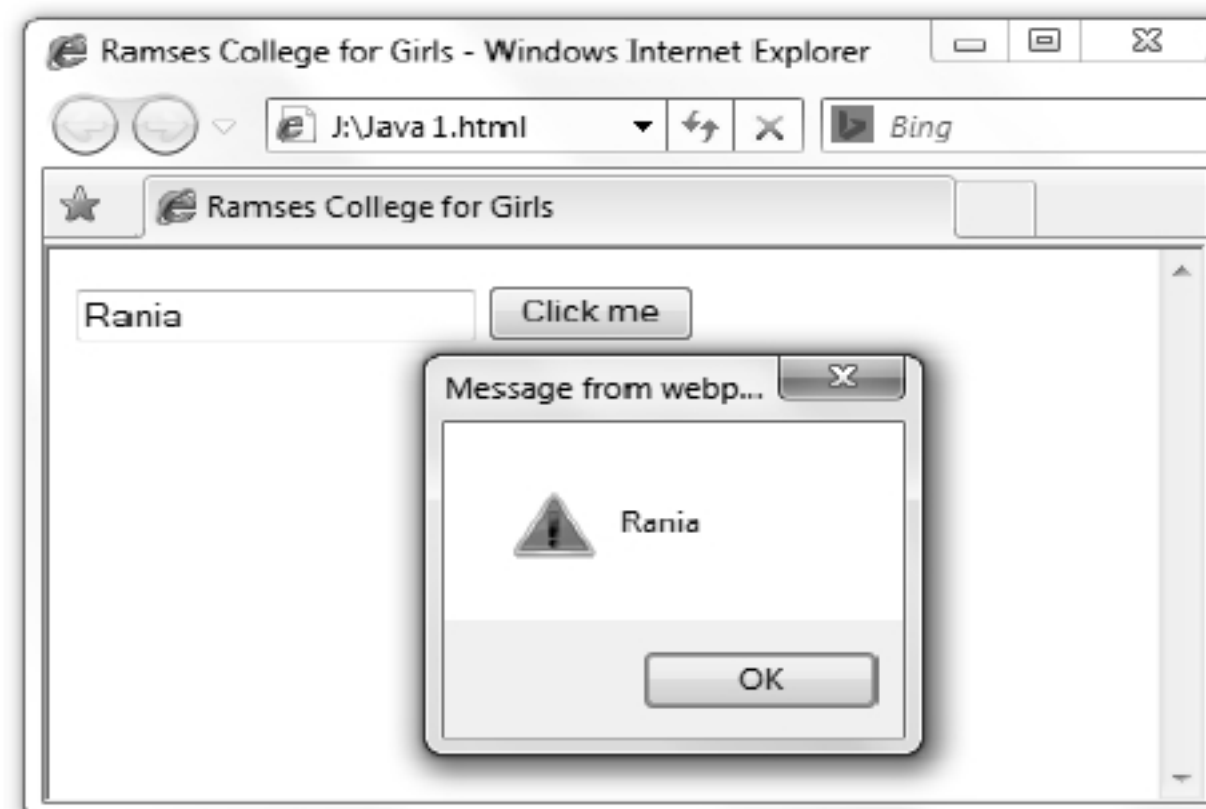
- Function will be called and executed only when a button clicked

Textbox Content Manipulation:

If you want to display an alert box, in which the content of the textbox can be seen.

Project 12

By using “Java Script” design a form in which when you press on “Click me” button the text found in the text box appears in a message box.



```

Java.html - Notepad
File Edit Format View Help
<html>
<head>
<title>
Ramses College for Girls
</title>
</head>
<body>
<form name="form1">
<input type="text" name="t1">
<input type="button" value="click me" onclick="f1()">
</form>
<script>
function f1()
{
alert(form1.t1.value);
}
</script>
</body>
</html>

```

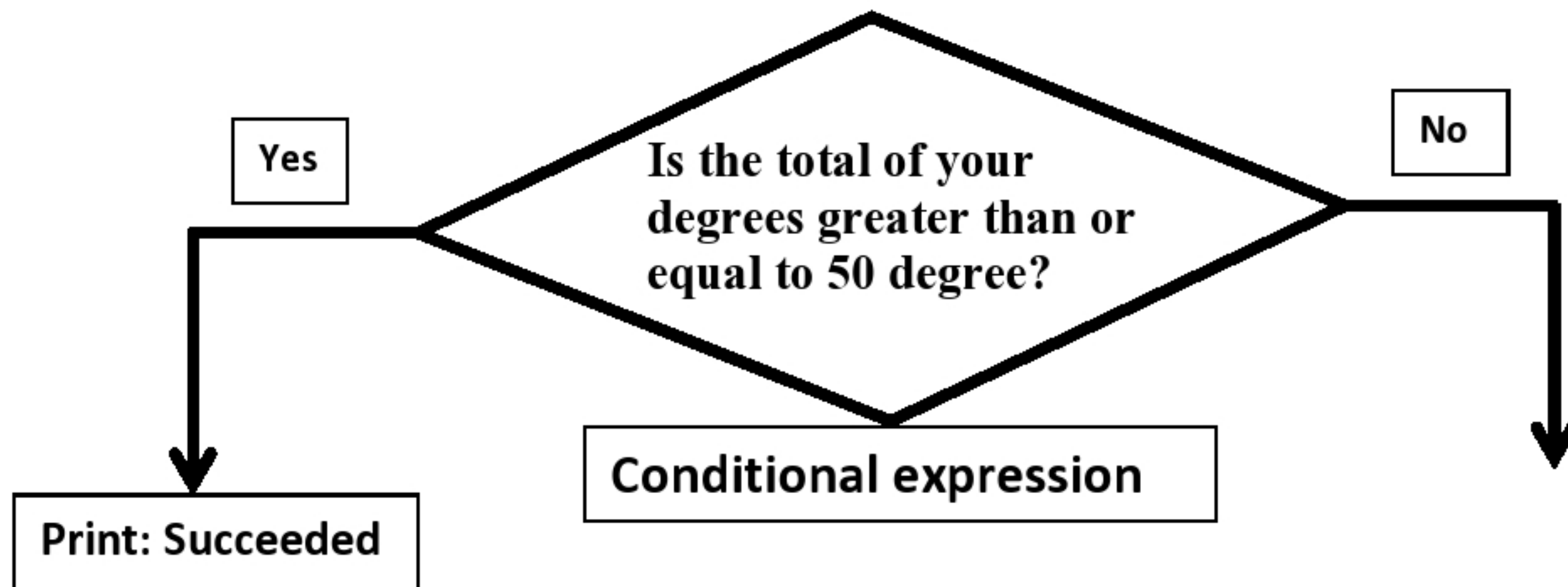
Notices:

In the previous HTML document, to use and manipulate the textbox,

- Give a name form1 to the <form> element (name="form1")
- Give a name t1 to the textbox (name="t1")

We can use the value of the textbox through (form1.t1.value); statement

Branching by using "IF statement "



Branching means executing or non-executing some statements according to a condition expression result.

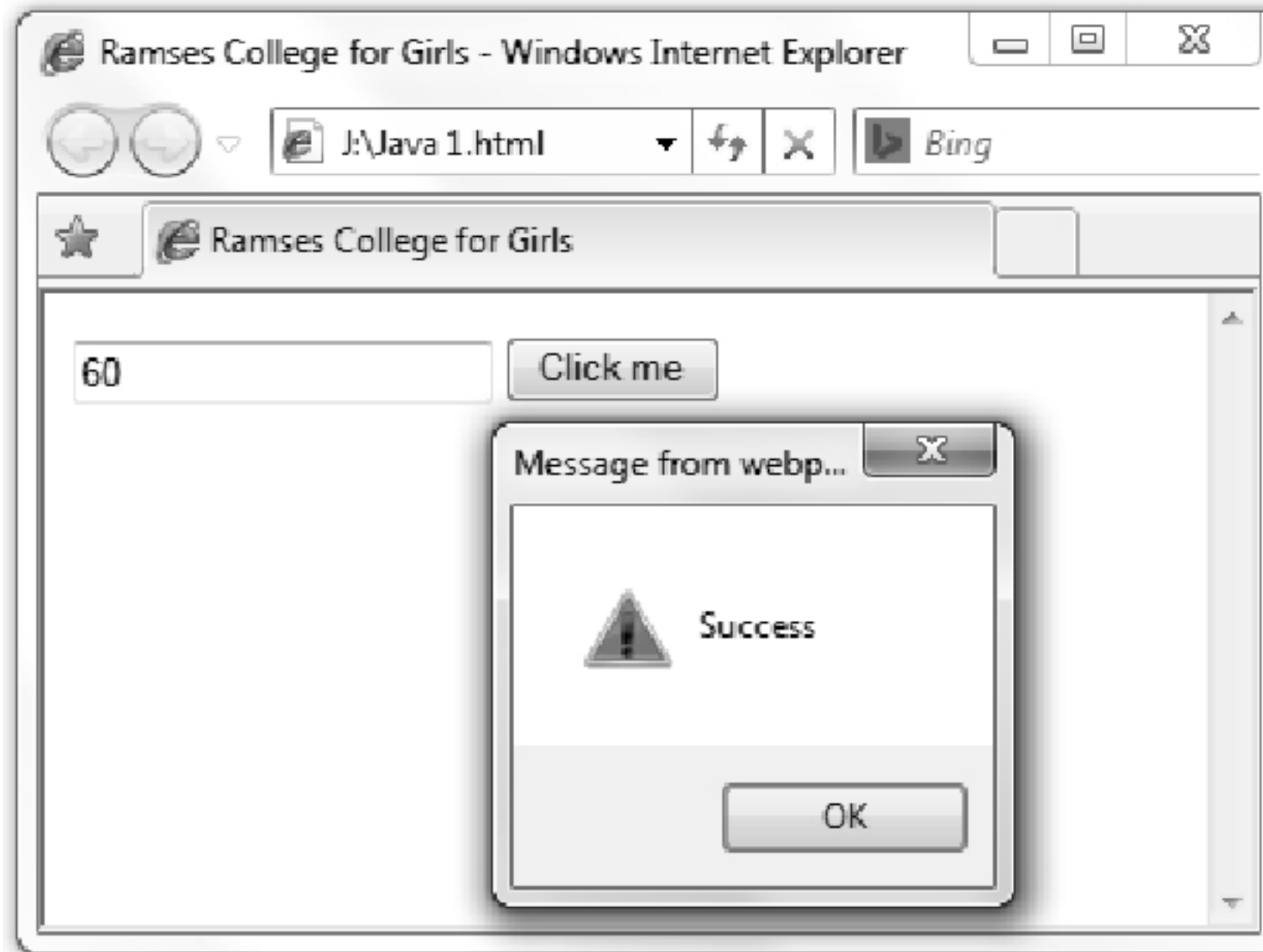
Create a webpage that contains a "Form " elements with:

- Textbox in which we can type a total of degrees.
- Button on which we can click.
- If the condition result leads to true, an alert box with "succeeded" will be displayed.



Project 13

By using “JavaScript”, design a form to check your total grades, if your grades are equal to 50 marks or more, a message “Success” will appear when you click on “Click me” button.



Validate data entered into web page

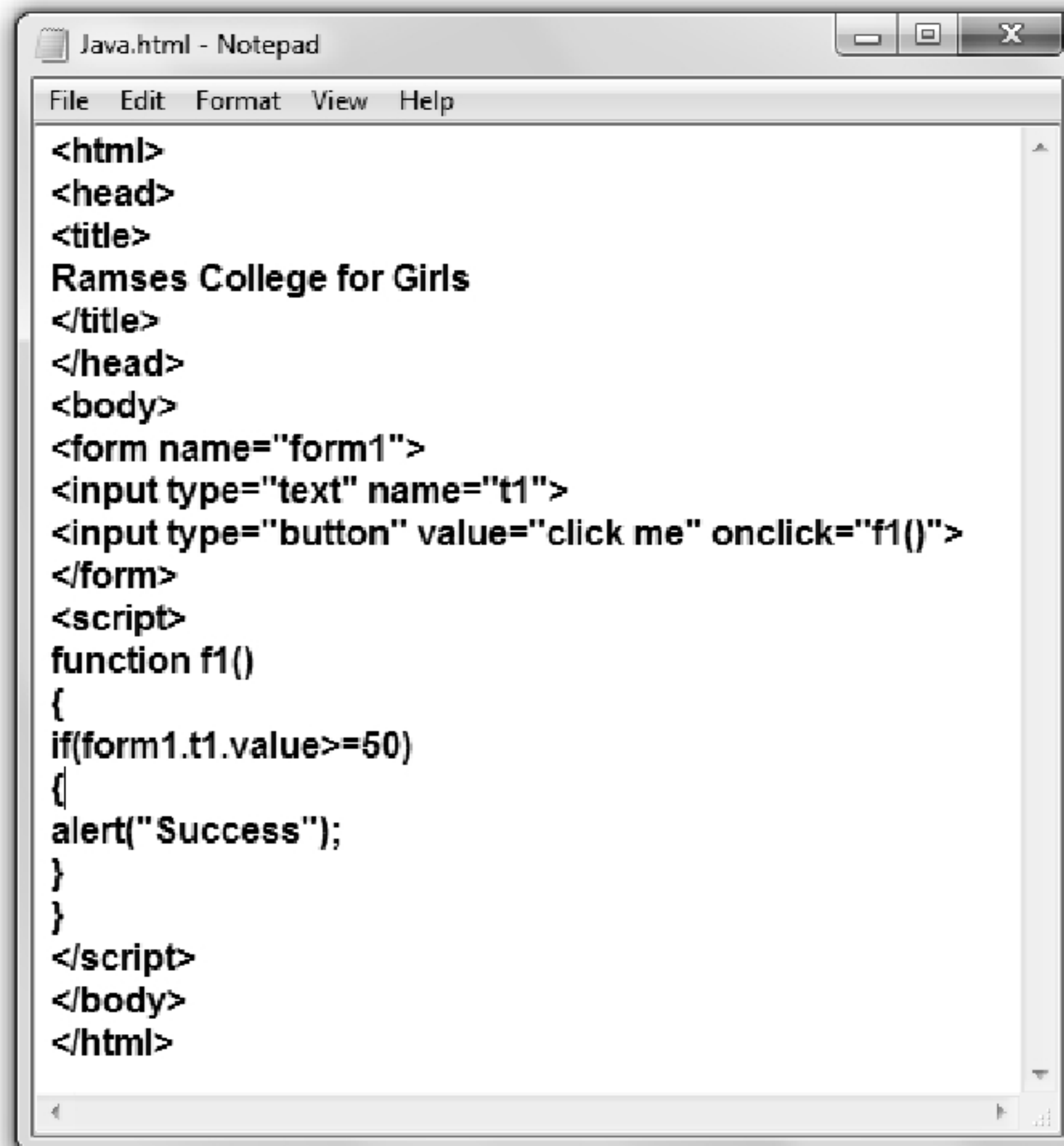
Data Validation: is the process of ensuring that user's input data is validated.

First: Required Field:

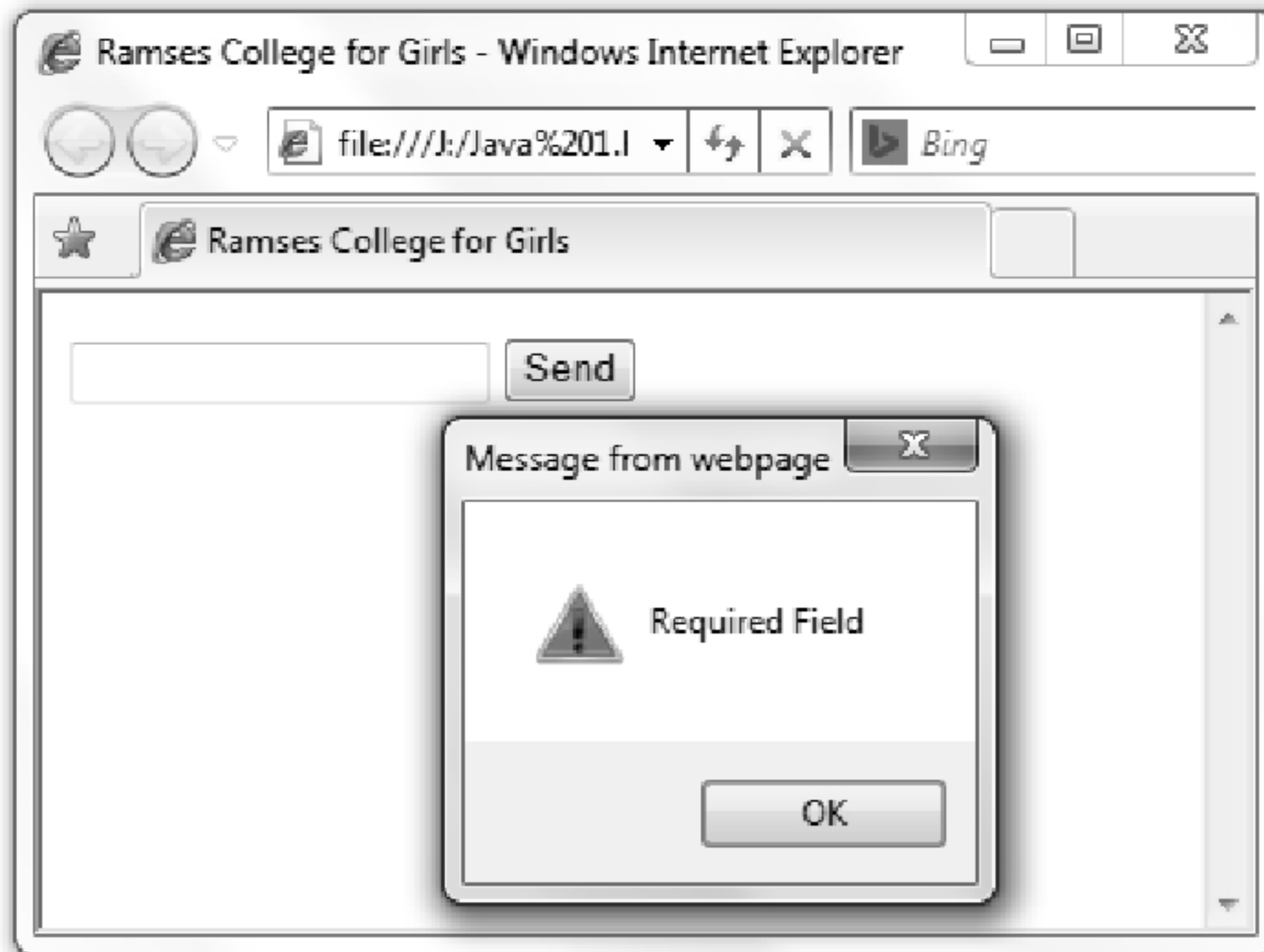
Ensuring that the user didn't leave the field empty is one of the data validation methods.

Project 14

By using “JavaScript” design a form contains one field (Student Name) in which the field is not allowed to be left empty so a message “Required Filed” will appear.



```
Java.html - Notepad
File Edit Format View Help
<html>
<head>
<title>
Ramses College for Girls
</title>
</head>
<body>
<form name="form1">
<input type="text" name="t1">
<input type="button" value="click me" onclick="f1()">
</form>
<script>
function f1()
{
if(form1.t1.value>=50)
{
alert("Success");
}
}
</script>
</body>
</html>
```





```

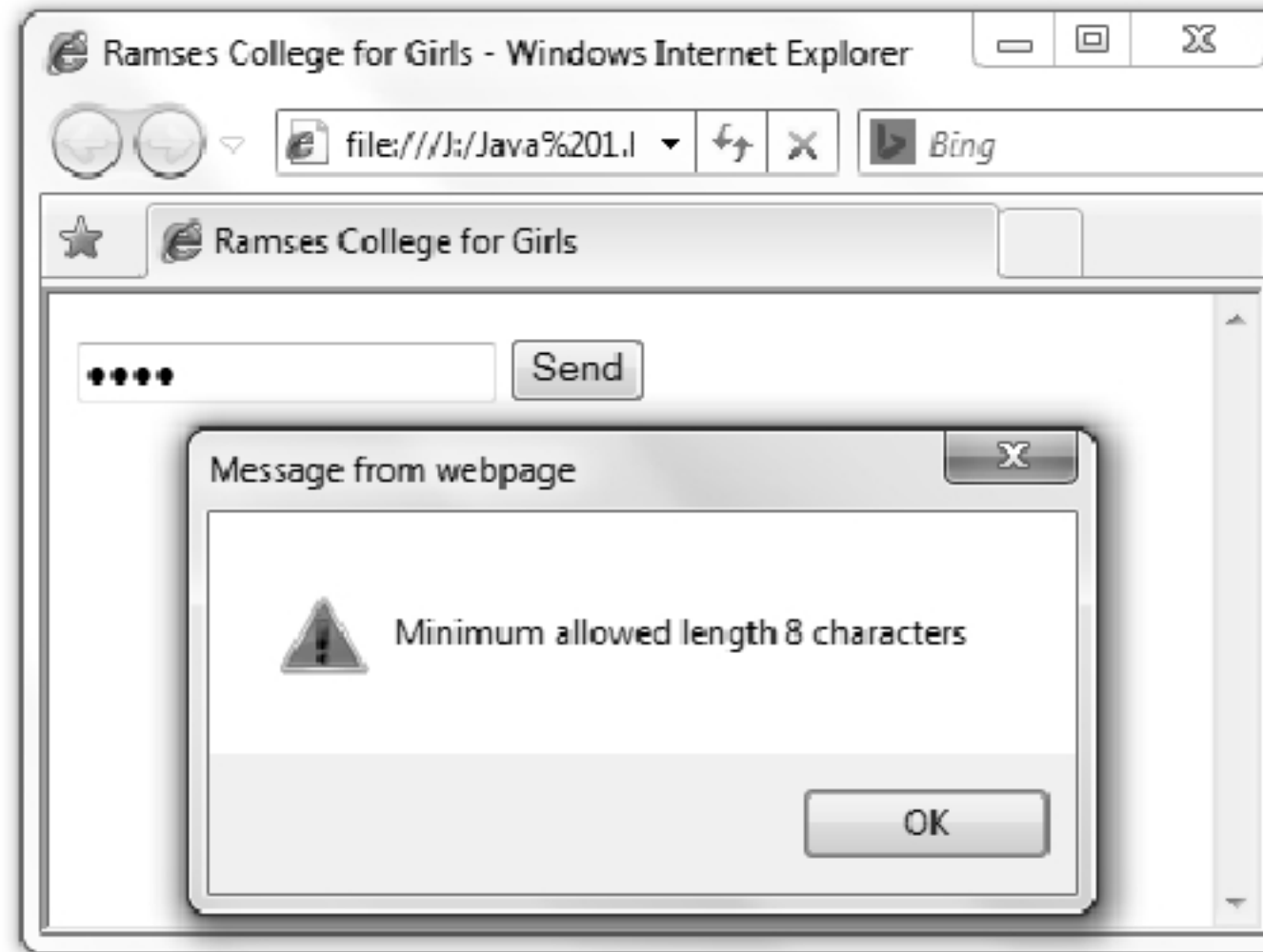
Java.html - Notepad
File Edit Format View Help
<html>
<head>
<title>
Ramses College for Girls
</title>
</head>
<body>
<form name="form1">
<input type="text" name="t1">
<input type="submit" value="send" onclick="return f1();"/>
</form>
<script>
function f1()
{
if(form1.t1.value=="")
{
alert("Required Field");
return false;
}
}
</script>
</body>
</html>
    
```

== means equal
 "" means that the text box is empty

Second: define the minimum allowed length for the input.

Project 15

By using “Java Script” design a form contains one field (Password) in which if you entered less than eight characters , the message box ”Minimum allowed length 8 characters” will appear, when you press on “Send” button.



```

Java.html - Notepad
File Edit Format View Help
<html>
<head>
<title>
Ramses College for Girls
</title>
</head>
<body>
<form name="form1">
<input type="password" name="p1">
<input type="submit" value="send" onclick="return f1();"/>
</form>
<script>
function f1()
{
if(form1.p1.value.length<8)
{
alert("Minimum allowed length 8 characters");
return false;
}
}
</script>
</body>
</html>
    
```

Third: Matching the data entered in the two fields

Project 16

By using “Java Script” design a form contains two fields (Password and Re-type password), if the data entered in the second field doesn’t match to the first field, then the message box ”password doesn’t match” will appear.





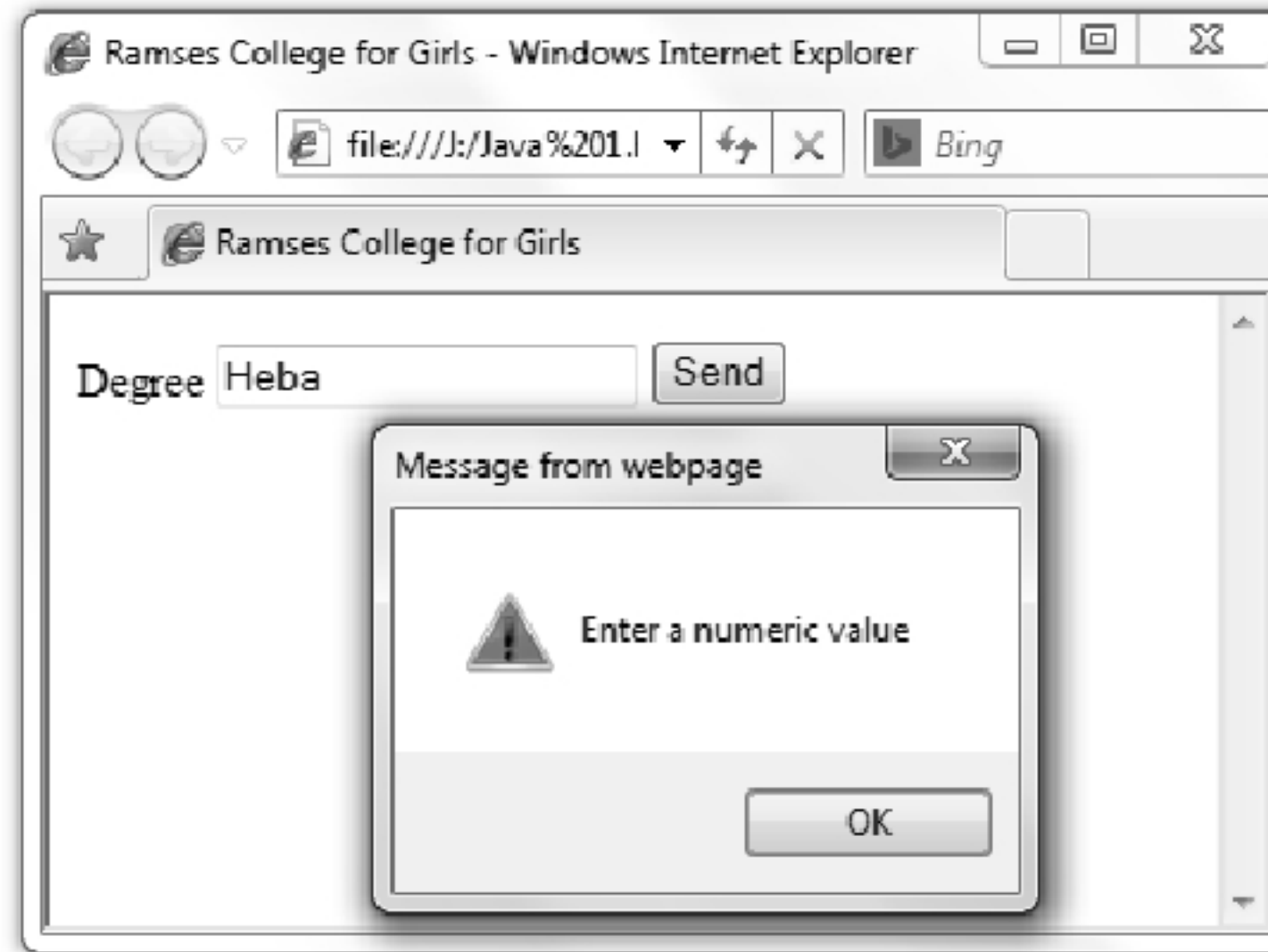
```
Java.html - Notepad
File Edit Format View Help
<html>
<head>
<title>
Ramses College for Girls
</title>
</head>
<body>
<form name="form1">
Password
<input type="password" name="p1"><br><br>
Re-type password
<input type="password" name="p2">
<input type="submit" value="send" onclick="return f1();"/>
</form>
<script>
function f1()
{
if(form1.p1.value!=form1.p2.value)
{
alert("Password doesn't match");
return false;
}
}
</script>
</body>
</html>
```

Not equal

Fourth: Prevent the user from entering different data type.

Project 17

By using “Java Script” design a form contains one field (Degree) if you type a text value in it, then the message box ”Enter a numeric value” will appear.



```

Java.html - Notepad
File Edit Format View Help
<html>
<head>
<title>
Ramses College for Girls
</title>
</head>
<body>
<form name="form1">
Degree
<input type="text" name="t1">
<input type="submit" value="send" onclick="return f1();"/>
</form>
<script>
function f1()
{
if(isNaN(form1.t1.value))
{
alert("Enter a numeric value");
return false;
}
}
</script>
</body>
</html>
    
```

Isn't a numeric value

Q1- Write the scientific term



- 1- It is a language used to develop an interactive webpage
(-----)
- 2- It is used for displaying a dialogue box contains a message to the user.
(-----)
- 3- It is used for displaying a text within the webpage contents.
(-----)
- 4- JavaScript statements grouped together in a blocked name and perform according to call it
(-----)
- 5- It is the process of ensuring that user's input is checked.
(-----)

Q2- Put (√) or (X)

- 1- In "JavaScript" language, each statement must end with a semi-colon (;). ()
- 2- There is not any difference between using small and capital letter while writing "JavaScript" statements. ()
- 3- If you write "JavaScript" statements within <script> ... </script> tag to be implemented when an event occurs (such as button click), you don't have to use a function. ()
- 4- Ensuring that the user didn't leave the field empty is one of the data validation methods. ()
- 5- To match the password values, we can use the condition, form1.text1.value=="". ()

Model answer:

- | | |
|--|----------------------|
| Q11- JavaScript language | 2- alert() Statement |
| 3- document.write() statement | 4- Function |
| 5- Data validation | |
| Q2 1-√ 2- X 3- X 4- √ 5- X | |



Internet Safety

The internet is one of the most important means of communication in all fields, which made it important to focus on the dangers that result from this usage. These dangers vary from virus infection, which destroy the system data, attack to spoil the user files or harm or blackmail, deploy identity or personal data theft and other types of dangers. Many people do not know that some information, which may be considered useless, are so important for others.

Identity Theft:

It is the impersonation of someone or using his name to use any disturbing information.

Malware:

Parasite programs are programs that backdoor computer system. The name is derived from Malicious Software. To protect your system against them, use antivirus programs and update them continually.

Spyware:

Computer programs collect personal information of the users without their consent. To protect your computer, you must use anti-spyware programs that detect programs like spyware, adware and files that control your internet browser.

Virus:

It is a small program that can spread itself to infect the computer and programs.

Secret codes:

They are all the personal data that must not be shown to everyone on the internet like: username, password or mobile phone number.



Important direction for internet safety:

- Keep your username and password secret.
- Think well before publishing your personal photo or sending text or sound files or videos on the internet.
- Before publishing anything ask the person before publishing his photo or sending their phone number or email address to other people online.
- Don't reply to unknown messages or from unknown people.
- Don't add people you do not know to your friend list.
- Don't send messages when angry.
- Not taking any step towards illegal operation is kind of hiding the wrong doer. So tell an adult directly of anything you doubt.
- Learn how to ban people from reaching chat box and print or screenshot them to be easy for parents to take the right step against them.
- Learn how to ban disturbing messages.
- Know well that online chat is not personal, some others may be recording or printing these chats and publishes them later.

