

JAVASCRIPT

- Function and Form Processing -

Week XII

Static Web Programming
Semester 1

Function in Javascript

- A JavaScript function is a block of code designed to perform a particular task.
- A JavaScript function is executed when "something" invokes it (calls it).
- A function can be called by typing the function name and followed by parameter as an option.
- A parameter in a function is optional.

Syntax

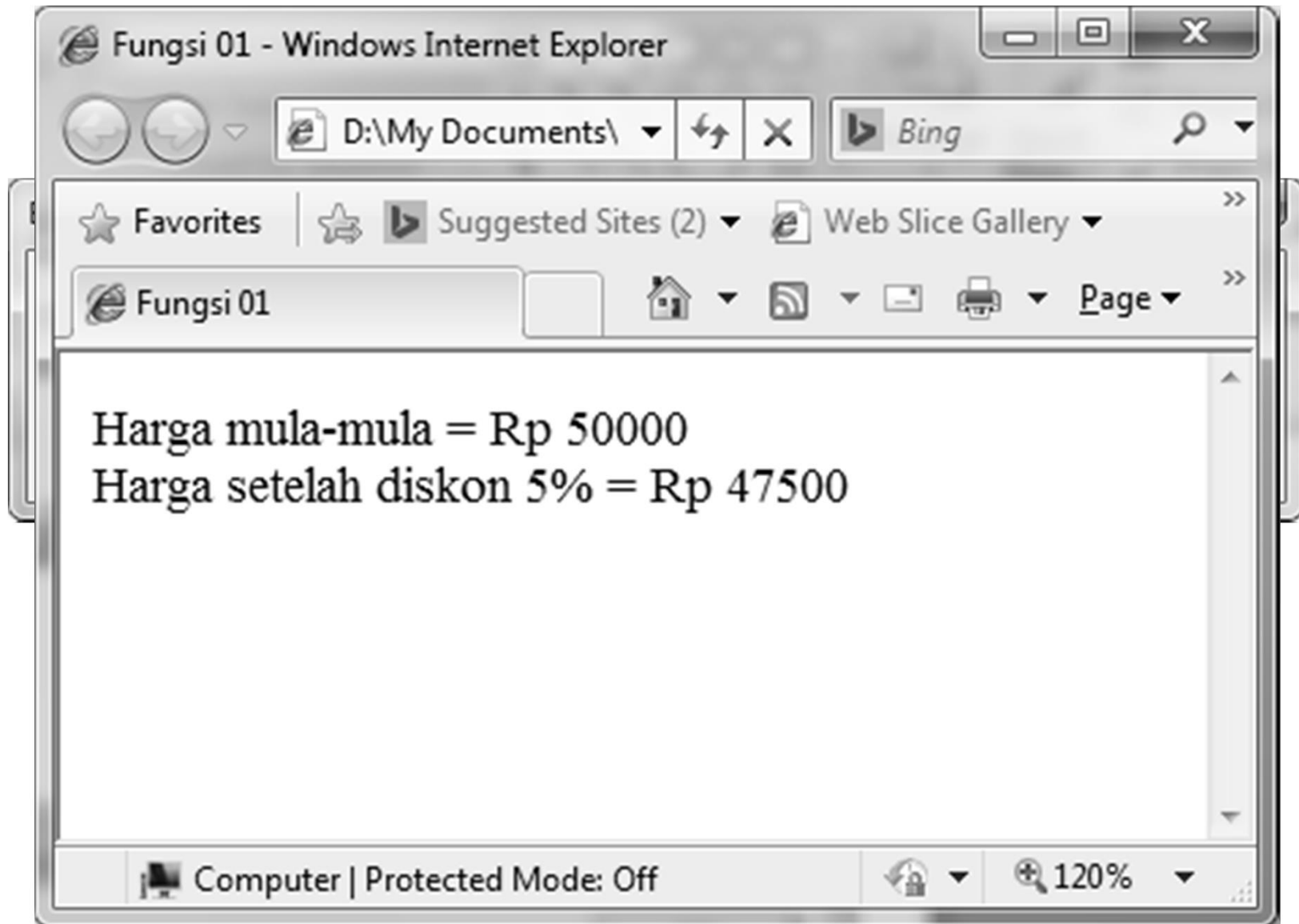
- Syntax of javascript function:

```
function name(parameter1,parameter2,  
parameter3)  
{  
    code to be executed  
}  
  
//function is called  
... function_name(parameter value)...
```

Example:

```
<body>
<script type="text/javascript">
    function discount(price)
    {
        var disc;
        disc = 0.05 * price;
        total = price - disc;
        return total;
    }
    var harga = prompt("Masukkan harga awal (Rp) :
    ",0);
    document.write("Harga mula-mula = Rp "+harga)
    document.write("<br/>Harga setelah diskon 5% = Rp
    " + discount(harga));
</script>
</body>
```

On browser



Return Value Statement

- In a function, return value is used to return the value to the caller code.
- However, a return value is not compulsory in a function.

Syntax of Function with Return Value



- Syntax :

```
function name(parameter)
{
    code to be executed;
    return value;
}

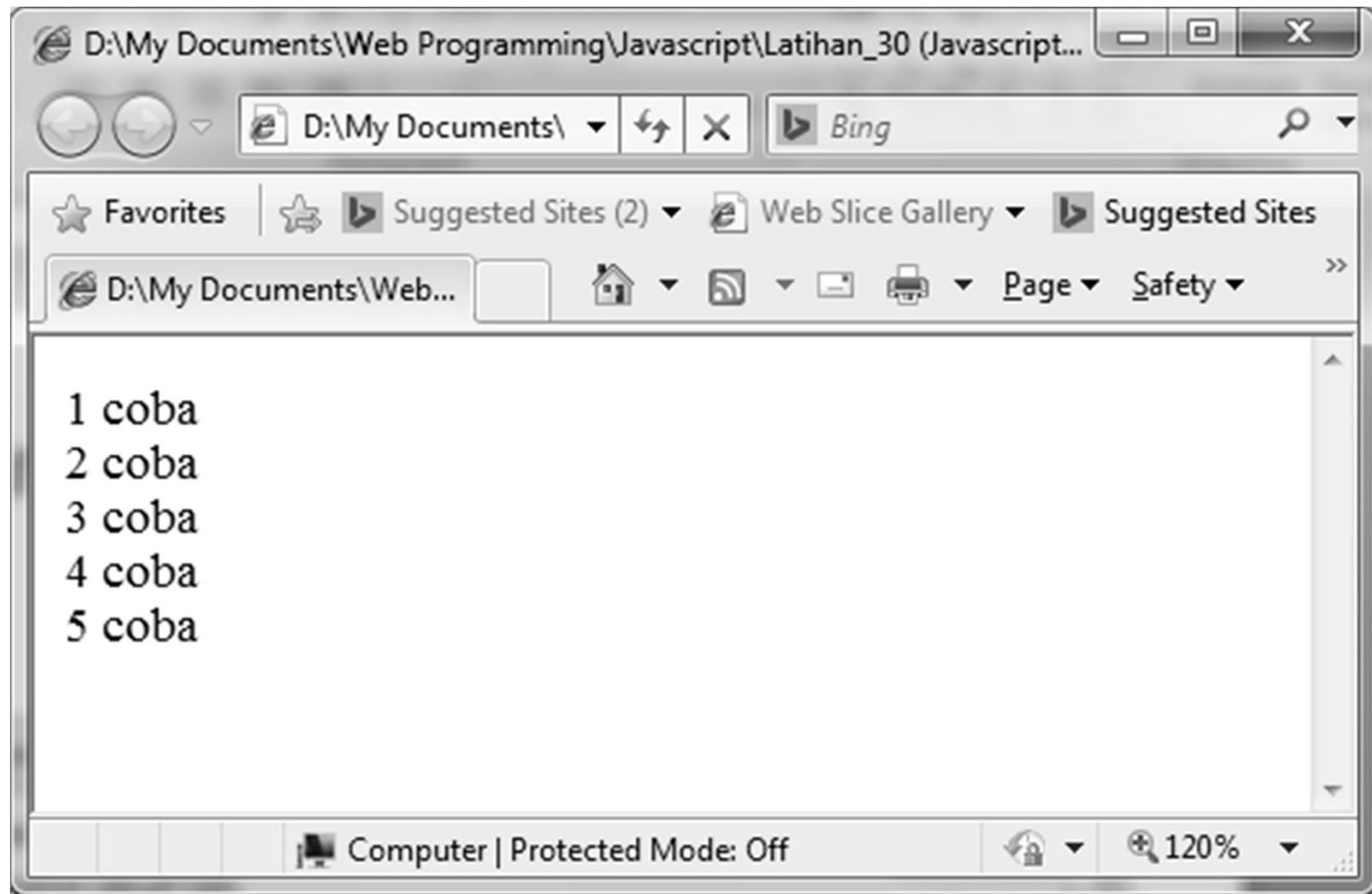
//function is called
... name(parameter value)...
```

Example without return:

```
<body>
  <script type="text/javascript">
    function cetakTeks(x,teks)
    {
      document.write(x+" "+teks + "<br/>");
    }

    var kata = prompt("Masukkan sebuah kata ", "");
    var i;
    for(i=1; i<=5; i++)
    {
      cetakTeks(i,kata);
    }
  </script>
</body>
```


On browser



Exercise I

Question

- Create a function to define whether an input number is odd or even.

FORM PROCESSING

- In this part, it will be explained how to process a data input from a form component, such as textbox, textarea, combo box, radio, button, etc.

Form

- Form tag in HTML have syntax as follows:

```
<form name="name">
```

```
...
```

```
...
```

```
...
```

```
</form>
```

Example:

```
<form name=test_form>
  <input type="text" name="edit1">
  <input type="text" name="edit2">
  ...
</form>
```

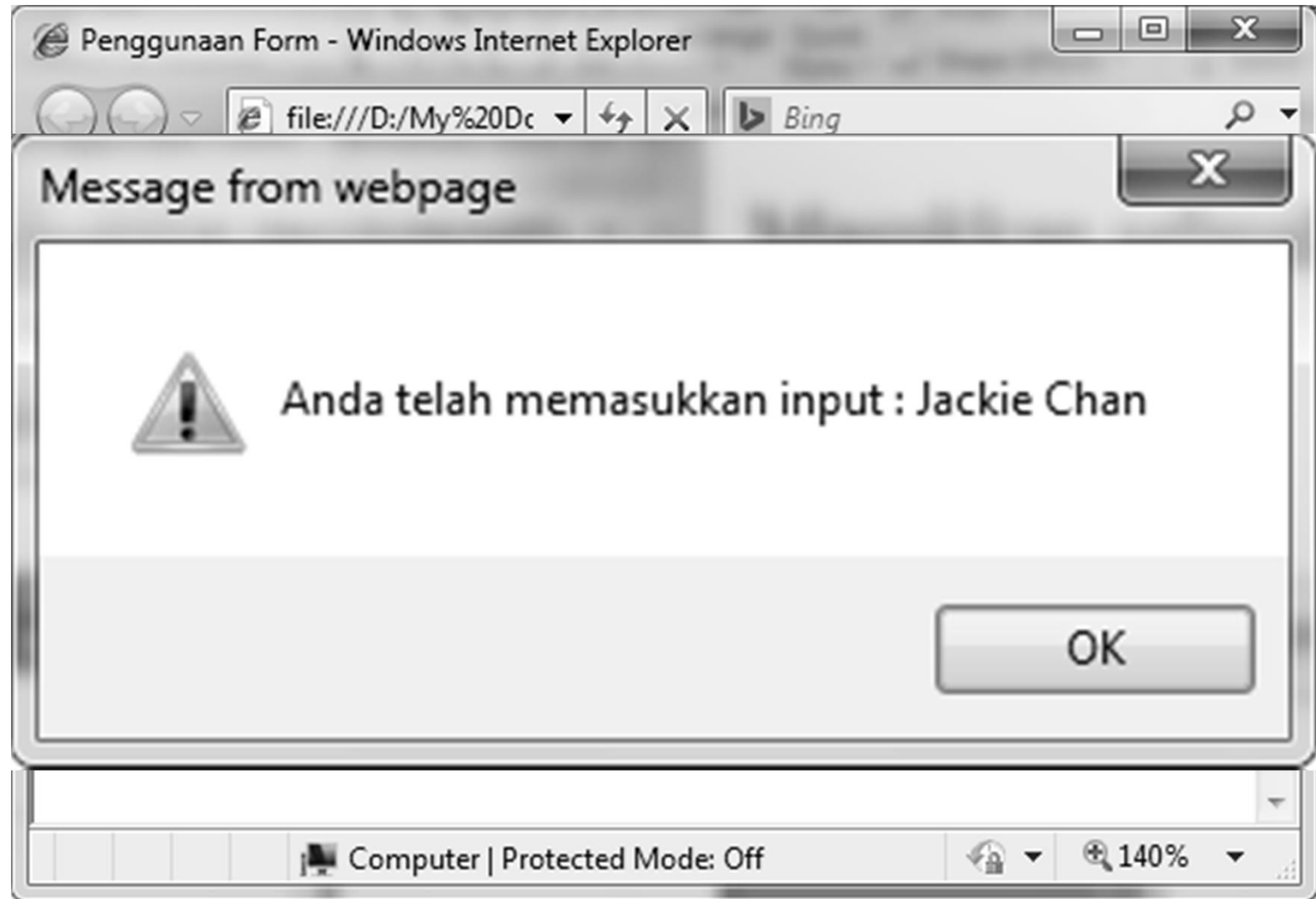
- To read the input value from a form component using document object as follows :

```
document.formname.componentname.value;
```

Example:

```
<head>
<title>Penggunaan Form</title>
  <script type="text/JavaScript">
    function baca()
    {
      var nilai = document.formku.input.value;
      alert("Anda telah memasukkan input : " + nilai);
    }
  </script>
</head>
<body>
  <h1>Baca Input</h1>
  <form name="formku">
    Masukkan sebuah input
    <input type="text" name="input">
    <input type="button" value="OK" onclick="baca()">
  </form>
</body>
```

On browser



Example:

```
<head>
<title>Kalkulator Sederhana</title>
<script type="text/javascript">
    function hitung()
    {
        var bil1 = parseFloat(document.formku.bil1.value);
        var bil2 = parseFloat(document.formku.bil2.value);
        var op = document.formku.operasi.value;
        var hasil;
        if (op=="jumlah") hasil = bil1+bil2;
        else if (op=="kurang") hasil = bil1-bil2;
        else if (op=="kali") hasil = bil1*bil2;
        else if (op=="bagi") hasil = bil1/bil2;
        else hasil = "-Pilih Operasi-";
        document.formku.result.value=hasil;
    }
</script>
</head>
```

Cont':

```
<body>
  <h1>Kalkulator Sederhana</h1>
  <form name="formku">
    Bilangan Pertama
    <input type="text" name="bil1"></input>
    <select name="operasi" onchange="hitung()">
      <option value="plh">--Pilih Operasi--</option>
      <option value="jumlah">Jumlah</option>
      <option value="kurang">Kurang</option>
      <option value="kali">Kali</option>
      <option value="bagi">Bagi</option>
    </select>
    Bilangan Kedua
    <input type="text" name="bil2"></input>
    =
    <input type="text" name="result"></input>
  </form>
</body>
```

On browser



Exercise 2

Question

- I. Modify the question from exercise I using form:



The screenshot shows a web browser window with the title bar 'Fungsi Ganjil Genap'. The page content includes a title 'Tipe Bilangan Ganjil atau Genap', a prompt 'Masukkan sebuah bilangan bulat :', an input field containing the number '6', a 'Proses' button, and the output 'Hasil = Genap'. The browser's status bar at the bottom indicates 'Computer | Protected Mode: Off' and a zoom level of '130%'.

Question

2. Create a simple calculator using function as follows:



The screenshot shows a web browser window with the title "Kalkulator Sederhana". The browser's address bar is empty, and the toolbar includes icons for home, search, print, and page/safety settings. The main content area displays the title "Kalkulator Sederhana" in a large, bold font. Below the title, there are three input fields labeled "Input Bilangan 1 :", "Input Bilangan 2 :", and "Hasil Operasi :". At the bottom of the form, there are four buttons labeled "+", "-", "x", and "/" for basic arithmetic operations. The browser's status bar at the bottom shows "Computer | Protected Mode: Off" and a zoom level of "130%".