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.
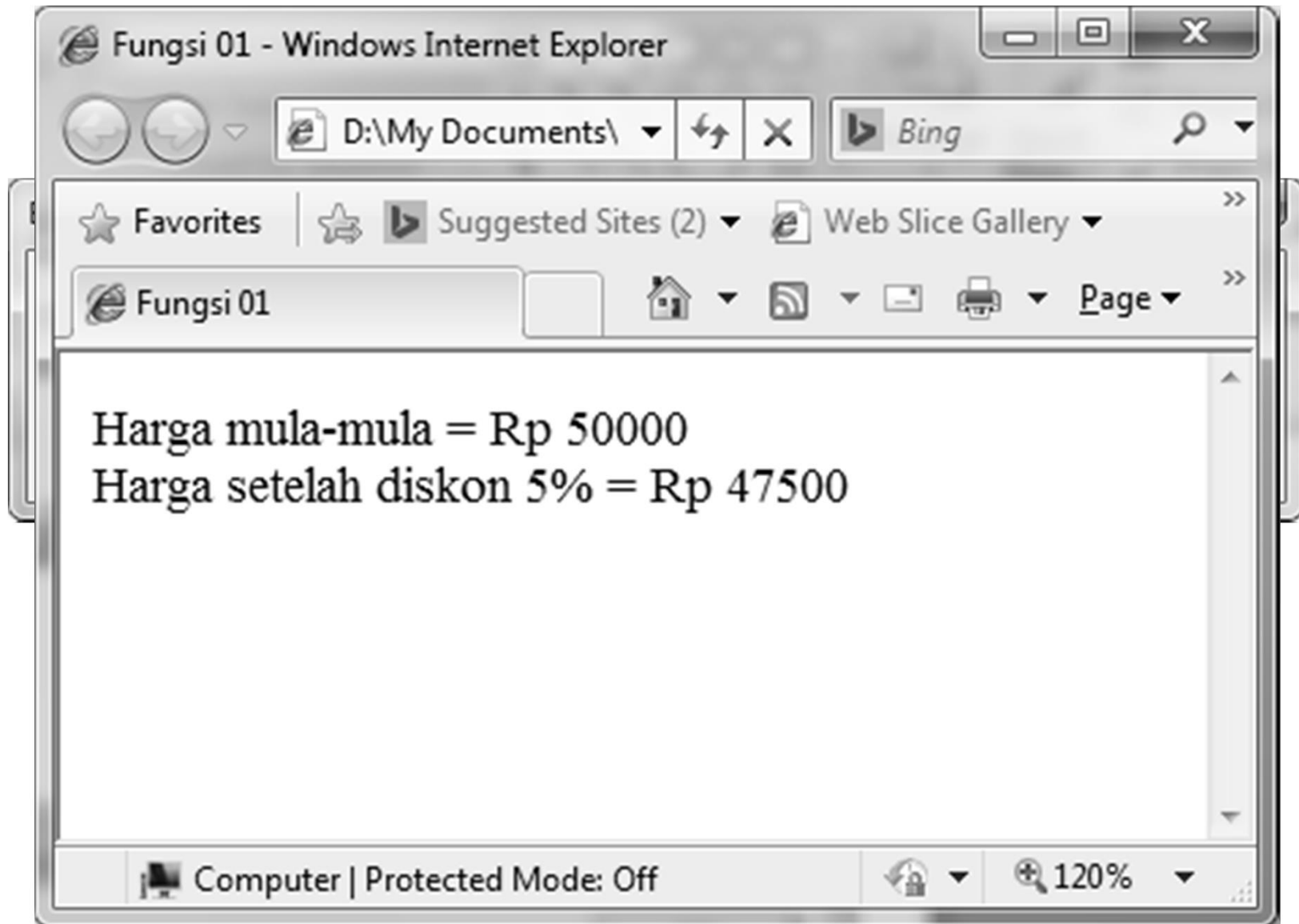- A parameter in a function is optional.

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

Harga mula-mula = Rp 50000
Harga setelah diskon 5% = Rp 47500

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)…
```
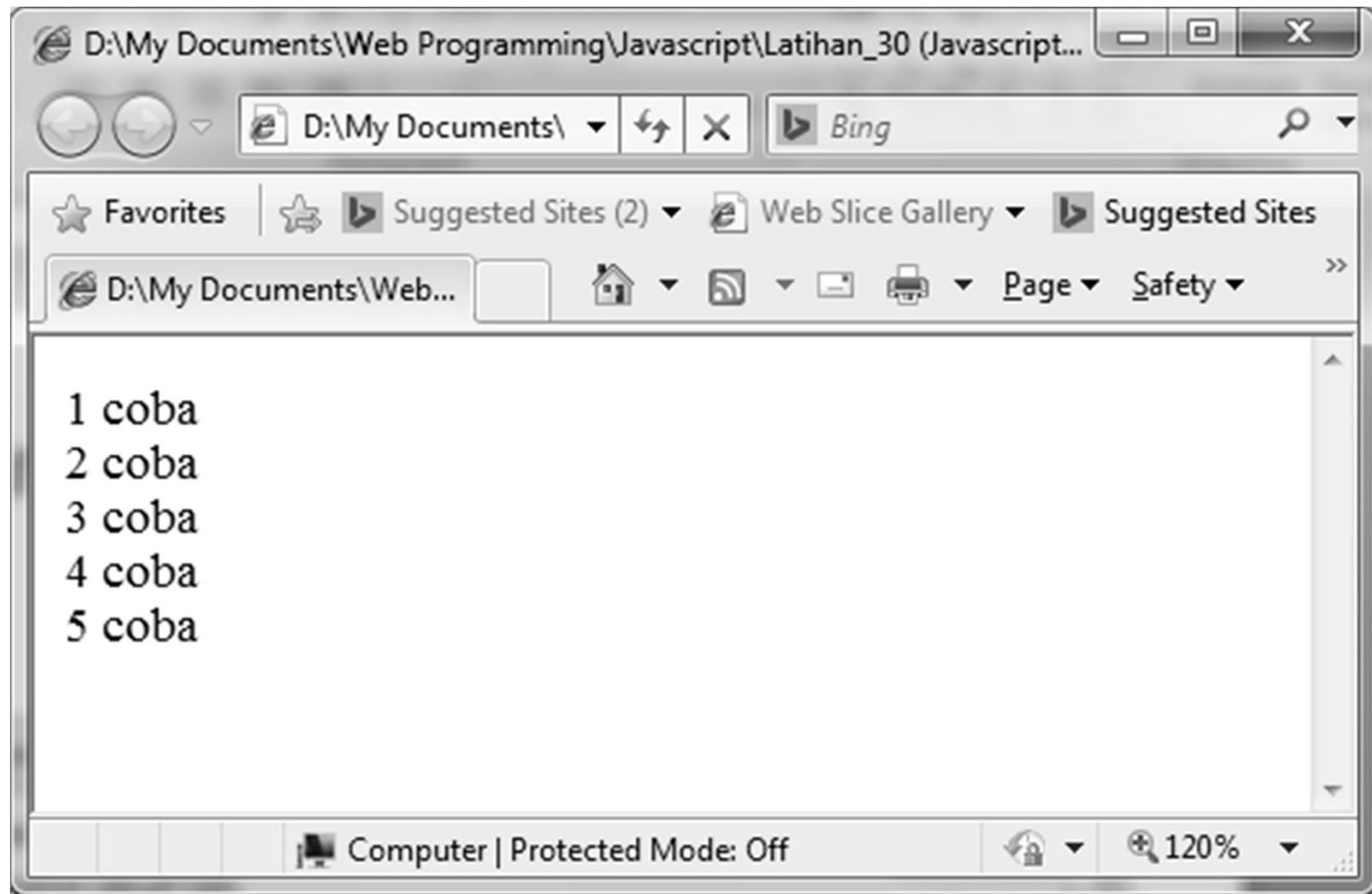
Example without return:

```
<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 1

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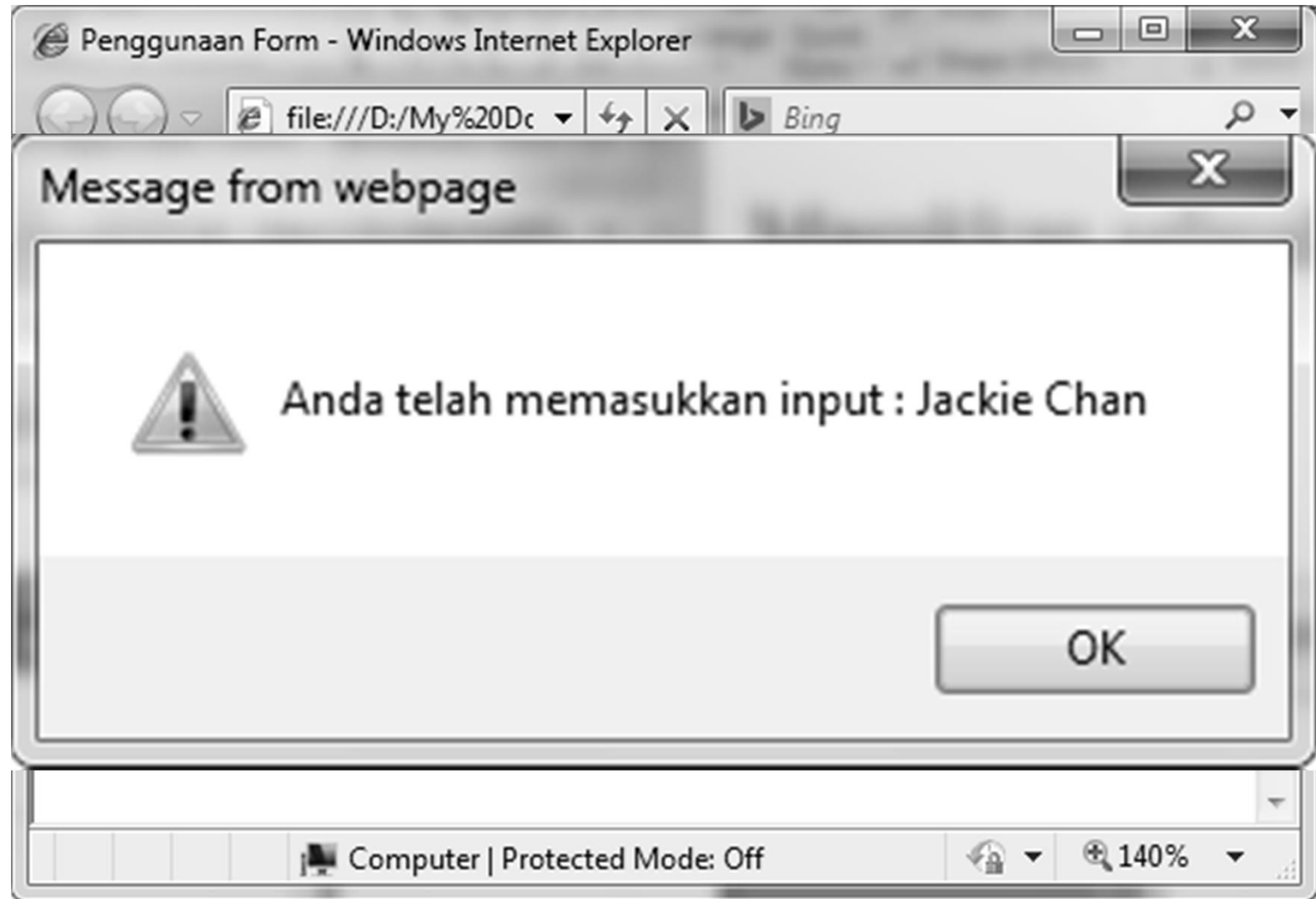
- To read the input value from a form component using document object as follows :

```
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

Kalkulator Sederhana

Bilangan Pertama `50`   [Bagi ▾]

Bilangan Kedua `20`   = `2.5`

Exercise 2

Question

1. Modify the question from exercise 1 using form:

Question

2. Create a simple calculator using function as follows: