



Lab05

COP 2500

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Off Hours: 3-5pm on Friday

Date

HEC 315

Most Important part

```
<html>                                     <html>
<head>                                     <head>
<title>Name</title>                       <title>Name</title>
<!-- comment lines -->                   <script language="JavaScript">
<!-- Name -->                             // Comment lines
<!-- Email -->                             // Name
<!-- Lab 02 -->                             // Email
</head>                                   // Lab02
                                           </script>
<body>                                     </head>
                                           <body>
</body>                                   </body>
</html>                                   </html>
```

Lab Overview

- Create AND save it as
`'dataTypesConditionalsAndLoops.HTML'`
- Tax Calculator: `<head>` section
 - Create function **`getTaxRate(inIncome)`**
 - Give income as argument and return tax rate
 - Create function **`calculateTaxes(inTaxableIncome, inTaxRate)`**
 - Give taxable income and tax rate as argument and return total tax
 - Create function **`refundOrPay(inTaxesOwed, inTaxesPaid)`**
 - Give tax owed and tax already paid amount and return how much is the balance



Lab Overview

- `<body>` section
- Use prompt box to ask user to input their annual income
- Use prompt box to ask user to input their deductibles
- Use prompt box to ask user to input already paid tax amount

- Calculate the taxable income
 - $\text{Taxable income} = \text{total income} - \text{deductibles}$
- Find out the applicable tax rate using function
- Calculate the taxes over taxable income
 - $\text{Tax amount} = \text{taxable income} * \text{tax rate}$



Lab Overview

- Calculate the refund/pay amount
 - `taxResult = Tax amount - tax paid`
 - If `(taxResult == 0)` then nothing to pay
 - Else if `(taxResult > 0)` then `taxResult` amount need to be paid
 - Else `taxResult` amount will get back
- Example
 - `taxResult = $150 - $50`
 - `taxResult = $100` which is greater than \$0, there you need to pay more \$100
 - Because, out of \$150 taxes you already paid \$50, therefore \$100 is remaining to be paid



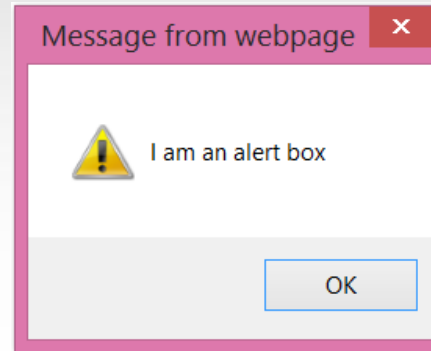
What should you know to solve assignment?

1. Variable and Constant creation
2. Popup Boxes (prompt and alert)
3. Conditional Statements (if-elseif-else)
4. Converting String to Integer using "parseInt()"
5. Function creation
6. Display result using document.write()

Popup Boxes

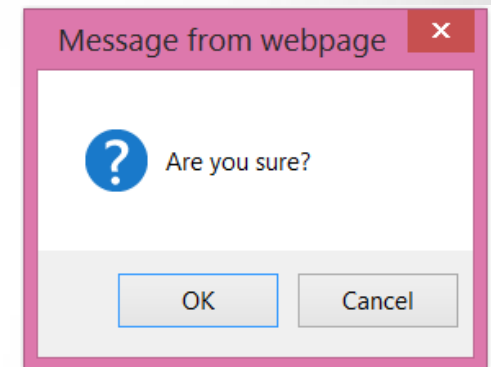
Alert box:

```
alert("I am an alert box!");
```



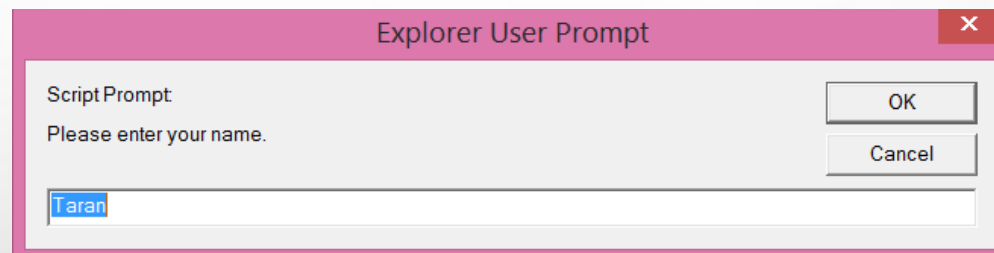
Confirm box:

```
var r = confirm("Press a button");
```



Prompt box:

```
var name = prompt("Please enter your name", "Taran");
```



If...Else...Conditional Blocks

Conditional statements are used to perform different actions based on different conditions.

```
if (time<20)
{
x="Good day";
}
```

```
if (time<20)
{
x="Good day";
}
else
{
x="Good evening";
}
```

```
if (time<10)
{
x="Good morning";
}
else if (time<20)
{
x="Good day";
}
else
{
x="Good evening";
}
```




Converting String To Integer

```
var a = parseInt("45");
```

Or

```
var a = prompt("Give me number");  
var b = parseInt(a);
```

Function Declaration

Function Defination:

```
function myFunction(var1,var2)  
{  
  some code  
}
```

Function Calling:

```
myFunction(argument1,argument2)
```

Function Example

```
<html>
<head>
<script language="javascript">
function myFunction(a, b)
{
var c =a*b;
return c;
}
</script>
</head>
<body>
<script language="javascript">
var mul = myFunction(45, 2);
document.write("multiplication of 45 and 2 is " + mul );
</script>
</body>
</html>
```

dataTypesConditionalsAndLoops.html

Welcome to COP 2500 Tax Service!

Your taxable income is \$5300

Based on a taxable income of \$5300 your tax rate is 10 percent

Your calculated taxes owed are \$530

You overpaid your taxes, you will receive a refund of \$120

Thank you for using COP 2500 Tax Service!



Grading Rubric

- Function “getTaxRate()” - 35 marks
- Function “calculateTaxes()” - 20 marks
- Function “refundOrPay()” - 20 marks
- Rest of body - 25 marks