



## Presidential Initiative for Artificial Intelligence and Computing (PIAIC)

<https://www.piaic.org>

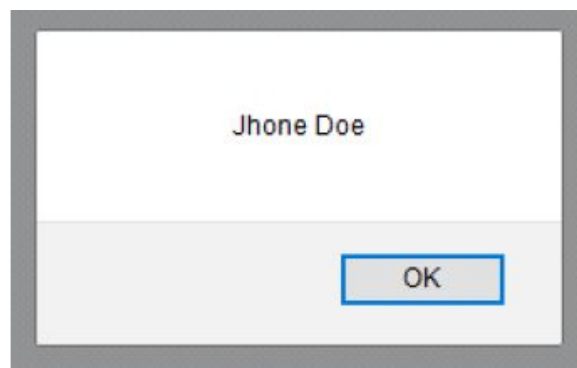
### JavaScript Programming Assignment 1

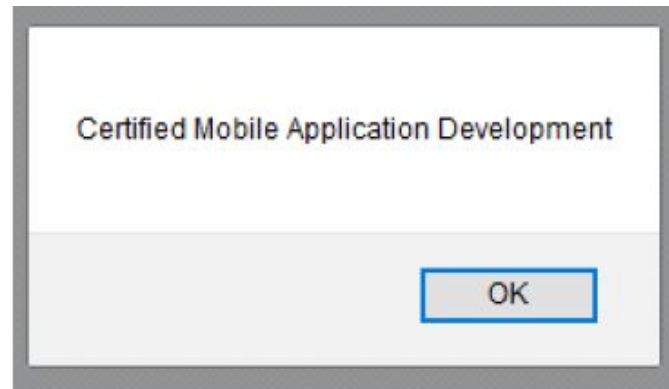
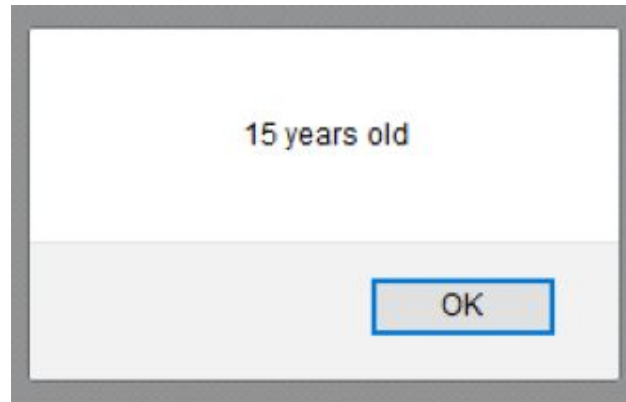
**Note: Check Rules end of document**

1. Write a script to display the following message on your web page:  
(Hint : Use line break)

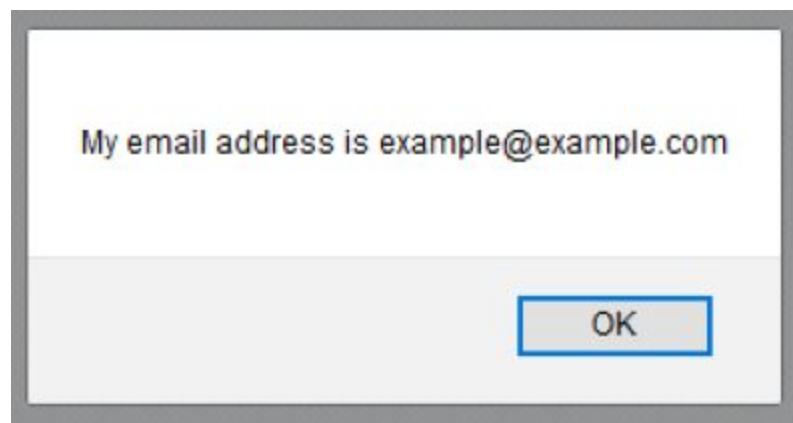


2. Write a script to save student's bio data in JS variables and show the data in alert boxes.





3. Declare a variable called email and assign to it a string that represents your Email Address(e.g. example@example.com). Show the below mentioned message in an alert box.(Hint: use string concatenation)



4. Write a script to display this in browser through JS



Yah! I can write HTML content through JavaScript

5. Declare a variable called age & assign to it your age. Show your age in an alert box.

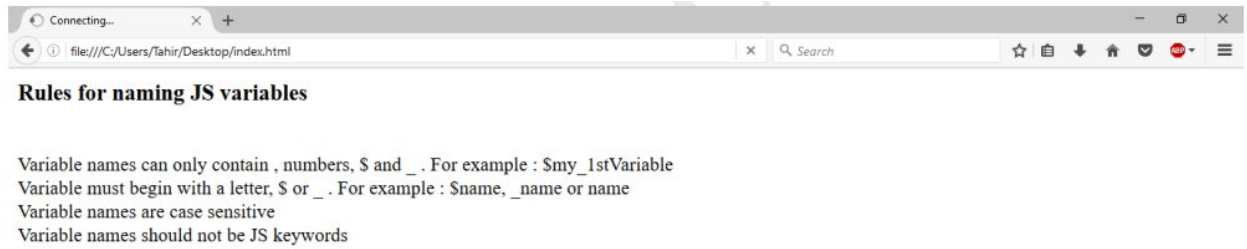


6. Declare a variable called birthYear & assign to it your birth year. Show the following message in your browser:



7. Display this in your browser

- A heading stating "Rules for naming JS variables"
- Variable names can only contain \_\_\_\_\_, \_\_\_\_\_,
- \_\_\_\_\_ and \_\_\_\_\_.
- For example \$my\_1stVariable.
- Variables must begin with a \_\_\_\_\_, \_\_\_\_\_ or
- \_\_\_\_\_. For example \$name, \_name or name
- Variable names are case \_\_\_\_\_
- Variable names should not be JS \_\_\_\_\_



8. Write a program that takes two numbers & add them in a new variable. Show the result in your browser.



9. Repeat task 8 for subtraction, multiplication, division & modulus.
10. Do the following using JS Mathematic Expressions
- Declare a variable.
  - Show the value of variable in your browser like "Value after variable declaration is: ??".
  - Initialize the variable with some number.
  - Show the value of variable in your browser like "Initial value: 5".
  - Increment the variable.
  - Show the value of variable in your browser like "Value after increment is: 6".
  - Add 7 to the variable.
  - Show the value of variable in your browser like "Value after addition is: 13".
  - Decrement the variable.
  - Show the value of variable in your browser like "Value after decrement is: 12".
  - Show the remainder after dividing the variable's value by 3.
  - Output : "The remainder is : 0".



Value after variable declaration is undefined

Initial value: 5

Value after increment is: 6

Value after addition is: 13

Value after decrement is: 12

The remainder is: 0

11. The Temperature Converter: It's hot out! Let's make a converter based on the steps here.

- Store a Celsius temperature into a variable.
- Convert it to Fahrenheit & output "N°C is N°F".
- Now store a Fahrenheit temperature into a variable.
- Convert it to Celsius & output "N°F is N°C".

Conversion Formulae:

$$^{\circ}\text{C} = (^{\circ}\text{F} - 32) \times 5 / 9$$
$$^{\circ}\text{F} = (^{\circ}\text{C} \times 9 / 5) + 32$$



25°C is 77°F

70°F is 21.1111111111111°C

12. Assume we have 10 US dollars & 25 Saudi Riyals. Write a script to convert the total currency to Pakistani Rupees. Perform all calculations in a single expression. (Exchange rates : 1 US Dollar = 155 Pakistani Rupee and 1 Saudi Riyal = 41 Pakistani Rupee)



## Currency in PKR

Total Currency in PKR: 1748

13. Write a program to take a number in a variable, do the required arithmetic to display the following result in your browser:



Result:

The value of a is: 10

.....

The value of ++a is: 11

Now the value of a is: 11

The value of a++ is: 11

Now the value of a is: 12

The value of --a is: 11

Now the value of a is: 11

The value of a-- is: 11

Now the value of a is: 10

---

14. What will be the output in variables **a**, **b** & **result** after execution of the following script:

```
var a = 2, b = 1;
```

```
var result = --a - --b + ++b + b--;
```

Explain the output at each stage:

```
--a;
```

```
--a - --b;
```

```
--a - --b + ++b;
```

```
--a - --b + ++b + b--;
```



a is ??

b is ??

result is ??

## Rules for Assignment completion and submission

- 1) Each task should be in separate file
- 2) Files name should be the task name e.g task1, task2, task 3
  - a) task1.html
  - b) task1.js
- 3) You should upload your code on GitHub or google drive and share link for code review
- 4) All files in assignment should be in one folder and folder name should contains assignment number e.g assignment1\_YourRollNo, assignment2\_YourRollNo
  - a) Create a folder
  - b) Add all tasks file in this assignment folder
  - c) Push code on github or upload folder on google drive
  - d) Share github url or drive url for code review