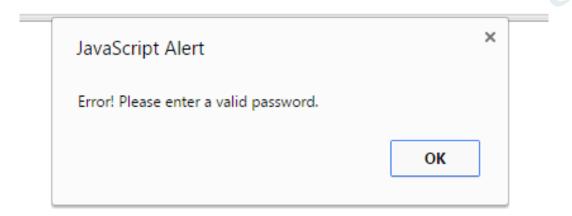


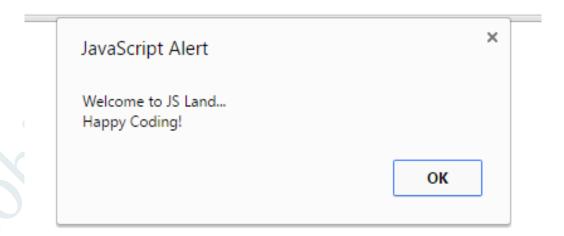
Assignment # 1

JAVASCRIPT

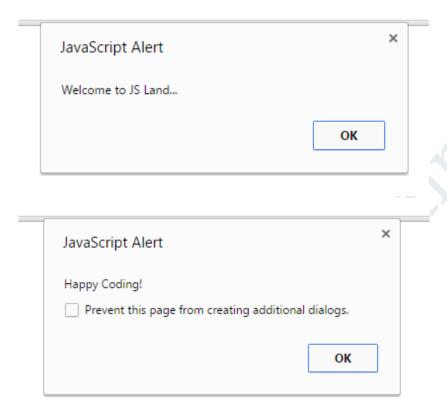
- 1. Write a script to greet your website visitor using JS alert box.
- 2. Write a script to display following message on your web page:



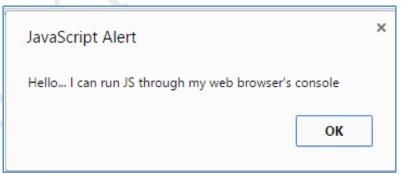
3. Write a script to display following message on your web page: (Hint: Use line break)



4. Write a script to display following messages in sequence:

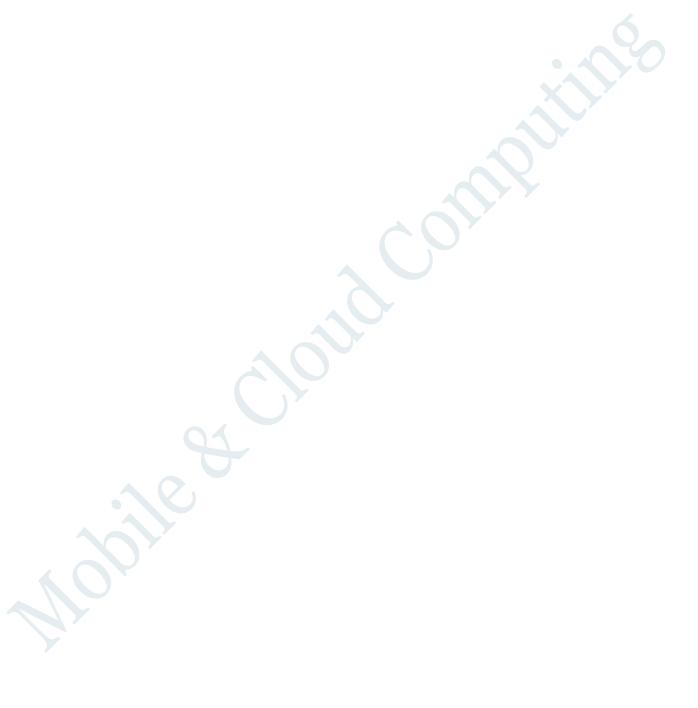


5. Generate the following message through browser's developer console:



- 6. Make use of alerts in your new/existing HTML & CSS project.
- 7. Practice placement of <script></script> element in following sections of your project in exercise 6:
  - a. Head
  - b. Body (before your page's HTML)

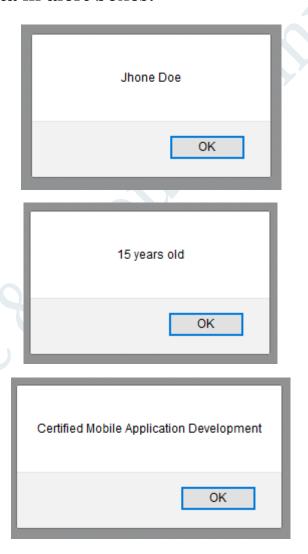
- c. Body (inside your page's HTML)
- d. Body (after your page's HTML)



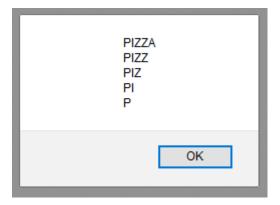
# **VARIABLES FOR STRINGS**

Assignment # 2
JAVASCRIPT

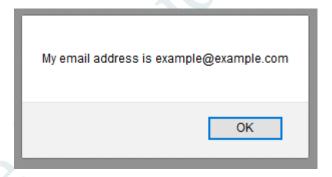
- 1. Declare a variable called username.
- 2. Declare a variable called *myName* & assign to it a string that represents your Full Name.
- 3. Write script to
  - a) Declare a JS variable, titled message.
  - b) Assign "Hello World" to variable message
  - c) Display the message in alert box.
- 4. Write a script to save student's bio data in JS variables and show the data in alert boxes.



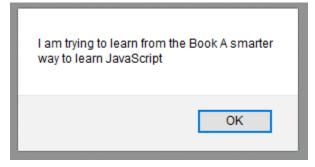
5. Write a script to display the following alert using one JS variable:



6. Declare a variable called *email* and assign to it a string that represents your Email Address(e.g. <a href="mailto:example@example.com">example@example.com</a>). Show the blow mentioned message in an alert box.(Hint: use string concatenation)



7. Declare a variable called book & give it the value "A smarter way to learn JavaScript". Display the following message in an alert box:

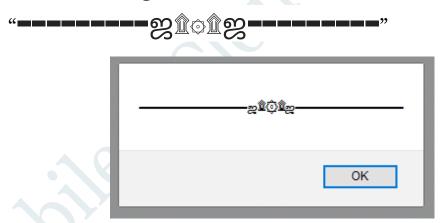


8. Write a script to display this in browser through JS



Yah! I can write HTML content through JavaScript

9. Store following string in a variable and show in alert and browser through JS



-- END --

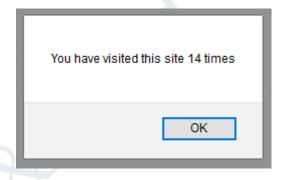
## **VARIABLES FOR NUMBERS**

Assignment # 3
JAVASCRIPT

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



2. Declare & initialize a variable to keep track of how many times a visitor has visited a web page. Show his/her number of visits on your web page. For example: "You have visited this site N times".



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



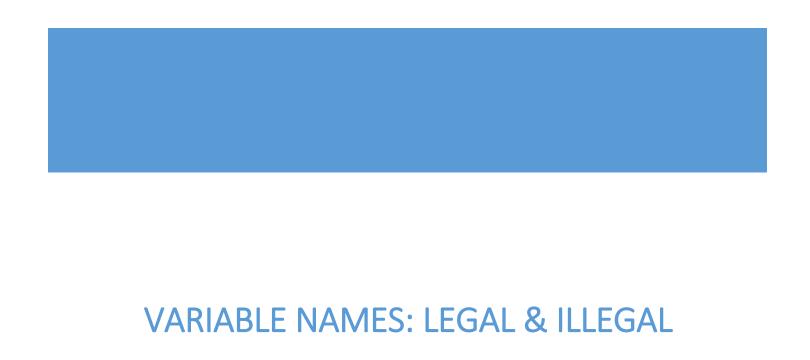
VariablesForNumbers(CMAD) - Microsoft Word

- 4. A visitor visits an online clothing store <a href="https://www.xyzClothing.com">www.xyzClothing.com</a>. Write a script to store in variables the following information:
  - a. Visitor's name
  - b. Product title
  - c. Quantity i.e. how many products a visitor wants to order

Show the following message in your browser: "John Doe ordered 5 T-shirt(s) on XYZ Clothing store".



John Doe ordered 5 T-shirt(s) on XYZ Clothing store





- 1. Declare 3 variables in one statement.
- 2. Declare 5 legal & 5 illegal variable names.
- 3. Display this in your browser
  - a) A heading stating "Rules for naming JS variables"
  - b) Variable names can only contain \_\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

For example \$my\_1stVariable

- c) Variables must begin with a \_\_\_\_\_, \_\_\_ or \_\_\_\_. For example \$name, \_name or name
- d) Variable names are case
- e) Variable names should not be JS \_\_\_\_\_



#### Rules for naming JS variables

Variable names can only contain , numbers, \$ and \_ . For example : \$my\_lstVariable Variable must begin with a letter, \$ or \_ . For example : \$name, \_name or name Variable names are case sensitive

Variable names should not be JS keywords

index.html - Visual Studio Code

-- END --

# **MATH EXPRESSIONS**

Assignment # 5
JAVASCRIPT

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



Sum of 3 and 5 is 8

- 2. Repeat task1 for subtraction, multiplication, division & modulus.
- 3. Do the following using JS Mathematic Expressions
  - a. Declare a variable.
  - b. Show the value of variable in your browser like "Value after variable declaration is: ??".
  - c. Initialize the variable with some number.
  - d. Show the value of variable in your browser like "Initial value: 5".
  - e. Increment the variable.
  - f. Show the value of variable in your browser like "Value after increment is: 6".
  - g. Add 7 to the variable.
  - h. Show the value of variable in your browser like "Value

after addition is: 13".

- i. Decrement the variable.
- j. Show the value of variable in your browser like "Value after decrement is: 12".
- k. Show the remainder after dividing the variable's value by 3.
- l. Output: "The remainder is: o".



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

4. Cost of one movie ticket is 600 PKR. Write a script to store

ticket price in a variable & calculate the cost of buying 5 tickets

to a movie. Example output:



#### Total cost to buy 5 tickets to a movie is 3000PKR

# 5. Write a script to display multiplication table of any number in your browser. E.g



- 6. **The Temperature Converter:** It's hot out! Let's make a converter based on the steps here.
  - a. Store a Celsius temperature into a variable.
  - b. Convert it to Fahrenheit & output "NNoC is NNoF".
  - c. Now store a Fahrenheit temperature into a variable.
  - d. Convert it to Celsius & output "NNoF is NNoC".

#### Conversion Formulae:



25<sup>0</sup>C is 77°F 70<sup>0</sup>F is 21.111111111111111°C

7. Write a program to implement checkout process of a shopping cart system for an e-commerce website. Store the following in variables

- a. Price of item 1
- b. Price of item 2
- c. Ordered quantity of item 1
- d. Ordered Quantity of item 2
- e. Shipping charges

Compute the total cost & show the receipt in your browser.



### **Shopping Cart**

Price of item 1 is 650 Quantity of item 1 is 3 Price of item 2 is 100 Quantity of item 2 is 7 Shipping Charges 100

Total cost of your order is 2750

8. Store total marks & marks obtained by a student in 2 variables. Compute the percentage & show the result in your browser



#### **Marks Sheet**

Total marks: 980 Marks obtained: 804

Percentage: 82.0408163265306%

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 = 104.80 Pakistani Rupee and 1 Saudi Riyal = 28 Pakistani Rupee)



### **Currency in PKR**

Total Currency in PKR: 1748

- 10. Write a program to initialize a variable with some number and do arithmetic in following sequence:
  - a. Add 5
  - b. Multiply by 10
  - c. Divide the result by 2

Perform all calculations in a single expression

- 11. **The Age Calculator:** Forgot how old someone is? Calculate it!
  - a. Store the current year in a variable.
  - b. Store their birth year in a variable.
  - c. Calculate their 2 possible ages based on the stored values.

Output them to the screen like so: "They are either NN or NN years old".



### Age Calculator

Current Year: 2016 Birth Year: 1992 Your Age is: 24

- 12. The Geometrizer: Calculate properties of a circle.
  - a. Store a radius into a variable.

b. Calculate the circumference based on the radius, and output "The circumference is NN".

(Hint: Circumference of a circle =  $2 \pi r$ ,  $\pi = 3.142$ )

Calculate the area based on the radius, and output "The area is NN". (Hint: Area of a circle =  $\pi$   $r_2$ ,  $\pi$  = 3.142)



### The Geometrizer

Radius of a circle: 20

The circumference is: 125.67999999999999

The area is: 1256.8

- 13. **The Lifetime Supply Calculator:** Ever wonder how much a "lifetime supply" of your favorite snack is? Wonder no more.
  - a. Store your favorite snack into a variable
  - b. Store your current age into a variable.
  - c. Store a maximum age into a variable.
  - d. Store an estimated amount per day (as a number).
  - e. Calculate how many would you eat total for the rest of your life.

Output the result to the screen like so: "You will need NNNN to last you until the ripe old age of NN".



## **The Lifetime Supply Calculator**

Favourite Snack: chocolate chip

Current age: 15

Estimated Maximum Age: 65 Amount of snacks per day: 3

You will need 150 chocolate chip to last you until the ripe old age of 65