



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

<https://www.piaic.org>

### **Blockchain Specialist Program**

#### **Quarter 2**

#### **JavaScript Programming Assignment 4**

**Note: Check Rules end of document**

1. Write a program to replace the “Hyder” to “Islam” in the word “Hyderabad” and display the result in your browser.

City: Hyderabad  
After replacement: Islamabad

2. Write a program that converts a string “472” to a number 472. Display the values & types in your browser.

Value: 472  
Type: string  
Value: 472  
Type: number

3. Write a program to take password as an input from user. The password must qualify these requirements:
  - a. It should contain alphabets and numbers
  - b. It should not start with a number
  - c. It must at least 8 characters long
  - d. If the password does not meet the above requirements, prompt the user to enter a valid password. For character codes of a-z, A-Z & 0-9
4. Write a program to validate email address with following evaluation
  - a. This string must contain @
  - b. This string must contain chars
  - c. The @ must have at least 1 char in front
  - d. The string must contain .(dot) after @ and at least 1 char.
5. Write a program that takes a positive integer from user & display the following in your browser.
  - a. number
  - b. round off value of the number
  - c. floor value of the number
  - d. ceil value of the number

number: 3.45214  
round off value: 3  
floor value: 3  
ceil value: 4

6. Write a program that simulates a dice using random() method of JS Math class. Display the value of dice in your browser.

random dice value: 4

random dice value: 6

7. You have a string “The quick brown fox jumps over the lazy dog”. Write a program to count the number of occurrences of the word “the” in given string.

Text: The quick brown fox jumps over the lazy dog  
There are 2 occurrence(s) of word 'the'

8. Convert number in words. Example

**Input**

23

123

1234

**Output**

Twenty Three

One Hundred and Twenty Three

One Thousand Two Hundred and Thirty Four.

9. Remove all available HTML tags from given string

```
<p><strong><em>Only print this</em></strong></p>
```

Output:

Only print this

10. Write a program that round a number to a given decimal places.

<i>Input:</i>		<i>Output:</i>
16.765 , 2	————→	16.77
12.37982 , 2	————→	12.38
-9.3079499 , 4	————→	-9.3079

11. Write a program to take input of a Number and find a Mean of All Digits

E.g:  $666 = 6 + 6 + 6 = 18 / 3 = 6$

$1246 = 1 + 2 + 4 + 5 = 12 / 4 = 3$

<b>Input:</b>	<b>Output:</b>
42	3
12345	3
666	6

12. Write a program that shows the message “First fifteen days of the month” if the date is less than the 16th of the month else shows “Last days of the month”.

First fifteen days of the month

13. Write a program that determines the minutes since midnight, Jan 1, 1970 and assigns it to a variable that hasn't been declared beforehand. Use any variable you like to represent the Date object.

Current Date: Sat Dec 05 2015 22:32:23 GMT+0500 (PKT)  
Elapsed milliseconds since January 1, 1970: 1449336743386  
Elapsed minutes since January 1, 1970: 402593.53982944443

14. Create a Date object for the current date and time. Extract the hours, reset the date object an hour ahead and finally display the date object in your browser.

current date: Sat Dec 05 2015 23:08:16 GMT+0500 (PKT)  
1 hour ago, it was Sat Dec 05 2015 22:08:16 GMT+0500 (PKT)

15. Write a program to ask the user about his age. Calculate and show his birth year in your browser

Your age is 21  
Your birth year is 1994

## **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, assignment2
  - 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