

# Client-side Technologies

## JavaScript Fundamentals

### Lab4

#### **1. String, Date and RegExp Objects**

**1.1. Write a script that accepts a string from user through prompt and count the number of a specific character that the user will define in another prompt. Ask the user whether to consider difference between letter cases or not then display the number of letter appearance.**

**1.2. Write a script to determine whether the entered string is palindrome or not. Request the string to be entered via prompt, ask the user whether to consider case sensitivity of the entered string or not via confirm, handle both cases in your script**

**i.e. RADAR NOON MOOM are palindrome.**

**Note: raDaR is not a palindrome if user requested considering case of entered string, it will be palindrome if user requested ignoring case sensitivity.**

**1.3 Build your own function that takes a single string argument and returns the largest word in the string. If there are two or more words that are the same length, return the first word from the string with that length.**

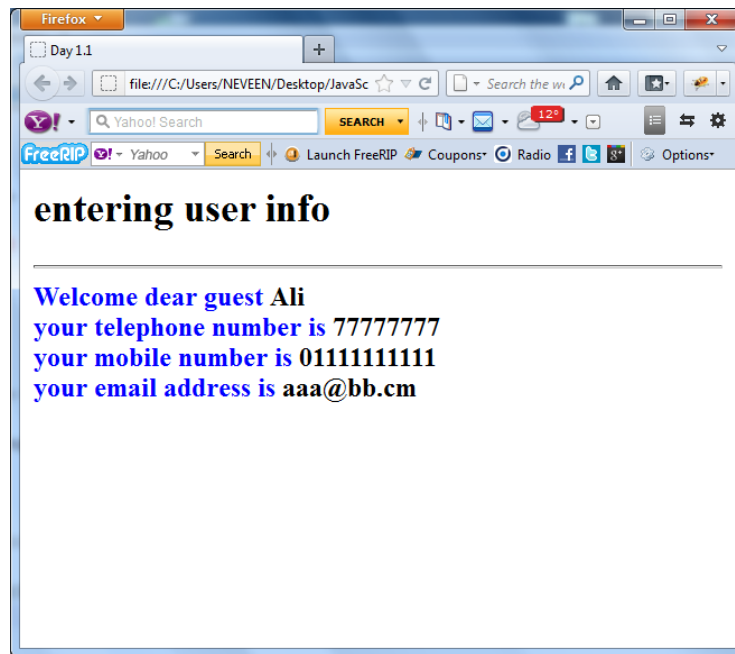
**e.g. if Input is: "this is a javascript string demo"**

**Output will be: javascript**

**1.4 Write a script that reads from the user his info; validates and displays it with a welcoming message in console**

| Parameter     | Validation  |
|---------------|---|
| Name          | Should be character, i.e Not a number   |
| Phone Number  | Should be number, with length = 8   |
| Mobile Number | Should be numbers, with length =11 and starts with (010 011 012) (Use RegExp )  |
| Email         | Should use regular exp. To validate that the email is formatted correctly.( <a href="#">abc@123.com</a> ). (Use RegExp ). |

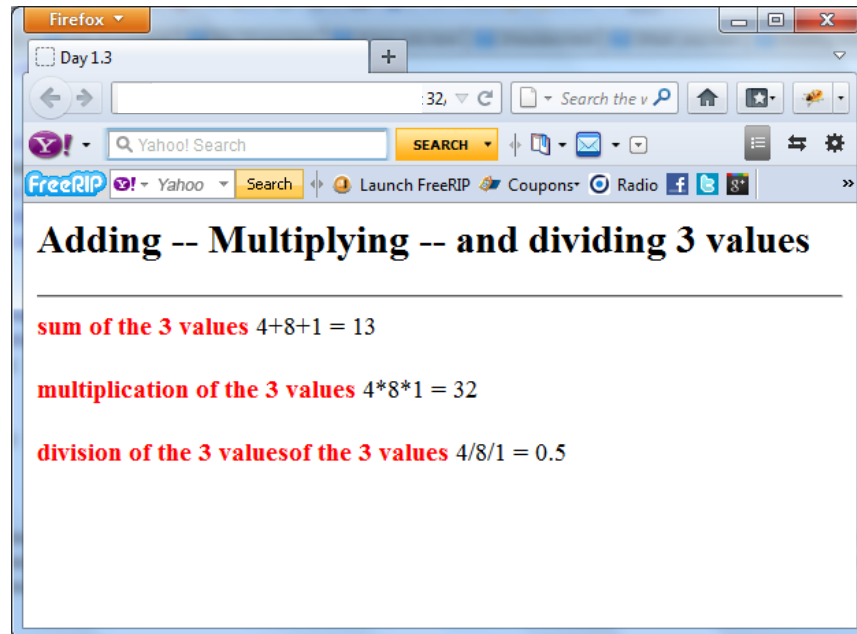
**Use coloring format according to user's choice. The user has to choose either red, green or blue color, take his choice via prompt.**



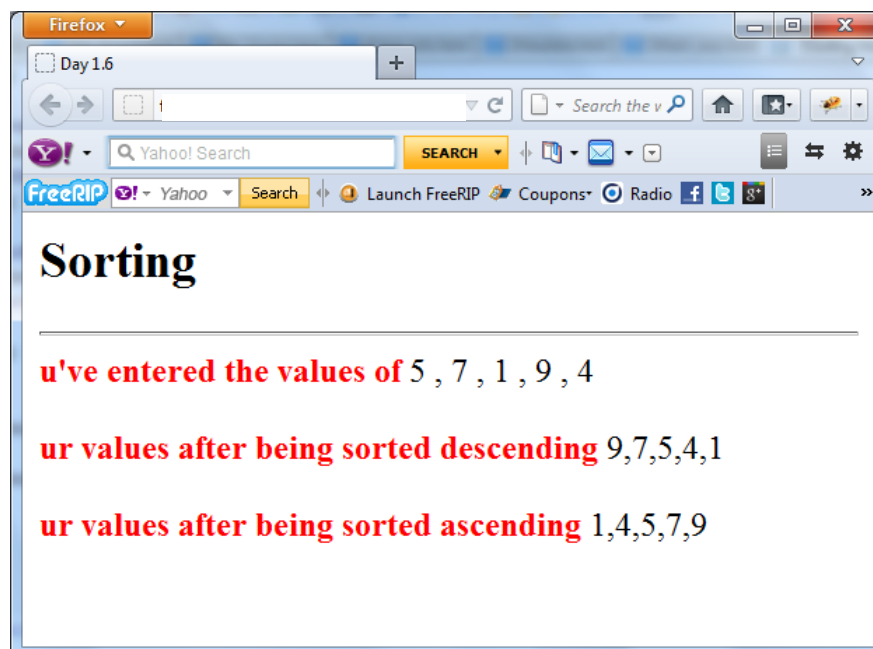
## 2. Array Object

2.1. Fill an array of 3 elements from the user, and apply each of the following mathematical operations on it (+, \*, /).

Format the output as shown in Fig.



2.2. Fill an array (5 numerical values) from the user, Sort it in descending and ascending orders then display the output as shown in Fig.



### 3. Math Object

Write a script that ask the user to

- Enter the value of a circle's radius in order to calculate its area as shown in fig.

What is the value of your circles raduis

OK Cancel

Total area of the circle is 78.53981633974483

☐ Prevent this page from creating additional dialogs

OK

- Enter another value to calculate its square root and alert the result as shown in fig.

What is the value you want to calculate its square root

☐ Prevent this page from creating additional dialogs

OK Cancel

squar root of 16 is 4

☐ Prevent this page from creating additional dialogs

OK

- Enter an angle to calculate its cos value then display the output as shown in Fig.

What is the angle you want to calculate its cos value

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OK Cancel

