STRING METHODS

Assignment # 21-25

JAVASCRIPT

1. Write a program that takes two user inputs for first and last name using prompt and merge them in a new variable titled **fullName**. Greet the user using his full name.

```
// ASSIGNMENT
let firstName=prompt("Enter your first Name:")
let lastName=prompt("Enter your last Name:")
let fullName=firstName+" "+lastName
alert("Welcome "+fullName)
```

2. Write a program to take a user input about his favorite mobile phone model. Find and display the length of user input in your browser

```
54
55  // ASSIGNMENT
56  let mobModel=prompt("Enter your favourite Mobile Model Name:")
57  let length=mobModel.length
58  document.write("Favourite mobile phone : "+mobModel+"<br>")
59  document.write("Length of string is : "+length)
```

My favorite phone is: Samsung Galaxy S6 Edge Plus
Length of string: 28

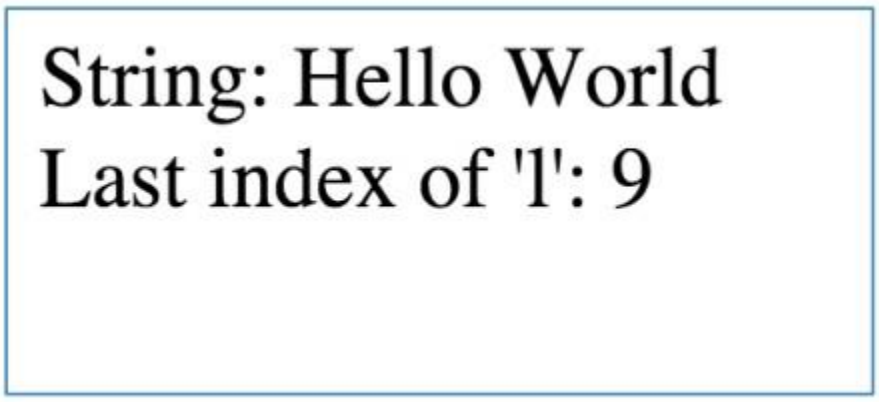
3. Write a program to find the index of letter “n” in the word “Pakistani” and display the result in your browser .

```
// ASSIGNMENT
let string="Pakistani"
let nindex=string.indexOf("n")
document.write("String: "+string+"<br>")
document.write("Index of n is : "+nindex)
```

String: Pakistani
Index of 'n': 7

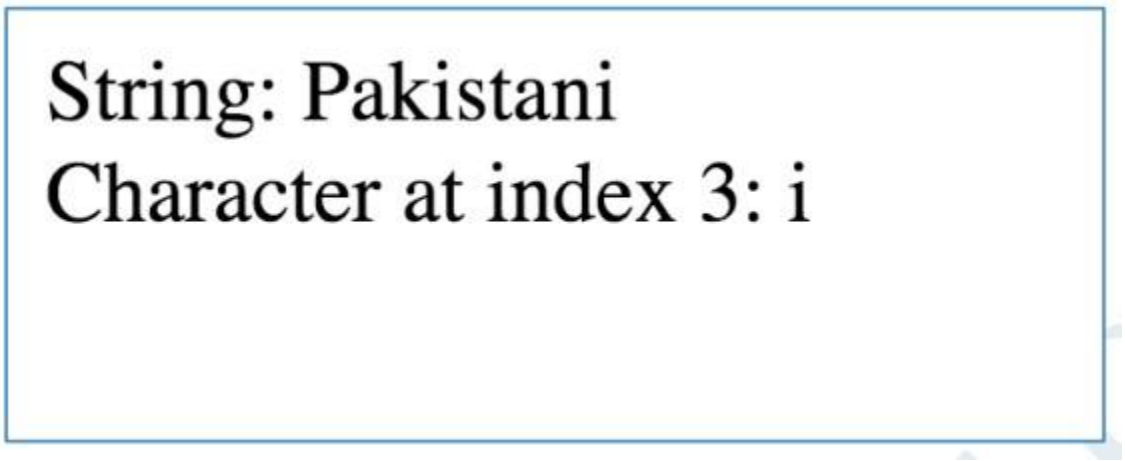
4. Write a program to find the last index of letter “l” in the word “Hello World” and display the result in your browser

```
// ASSIGNMENT
let string="Hello World"
let lindex=string.lastIndexOf("l")
document.write("String: "+string+"<br>")
document.write("Last Index of \"l\" is : "+lindex)
```



5. Write a program to find the character at 3rd index in the word “Pakistani” and display the result in your browser.

```
// ASSIGNMENT
let string="Pakistani"
let cindex=string.charAt(3)
document.write("String: "+string+"<br>")
document.write("character at 3rd Index is : "+cindex)
```



6. Repeat Q1 using string concat() method.

```
// ASSIGNMENT
let firstName=prompt("Enter first Name:")
let lastName=prompt("Enter last Name:")
let fullname=firstName.concat(" ",lastName)
alert("Welcome "+fullname)
```

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

```
// ASSIGNMENT
let city="Hyderabad"
let replacement=city.replace("Hyder","Islam")
document.write("City: "+city+"<br>")
document.write("After Replacement: "+replacement)
```

City: Hyderabad
After replacement: Islamabad

8. Write a program to replace all occurrences of "**and**" in the string with "**&**" and display the result in your browser.
   var message = "Ali and Sami are best friends. They play cricket and football together.";

```
// ASSIGNMENT
var message = "Ali and Sami are best friends. They play cricket and football together.";
message=message.replaceAll("and","&")
document.write(message)
```

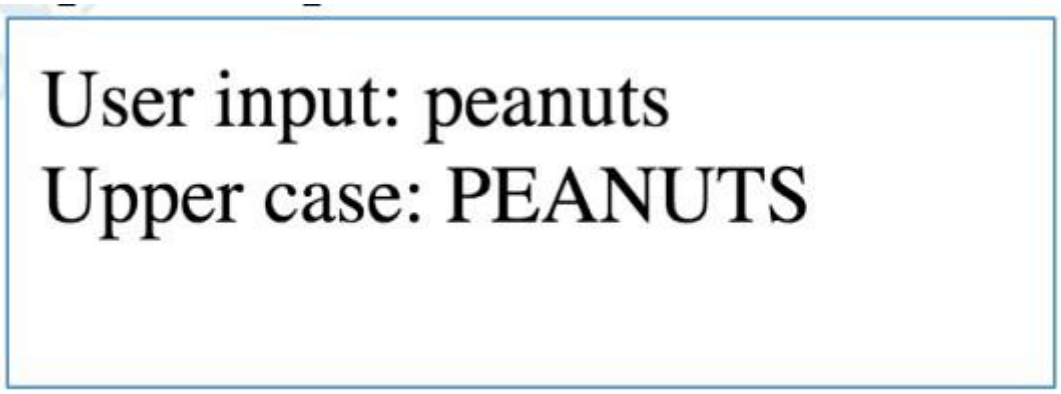
9. Write a program that converts a string "472" to a number 472. Display the values & types in your browser.

```
// ASSIGNMENT
let value="272"
document.write("Value: "+value+" type: "+typeof(value)+"<br>")
value=+value
document.write("Value: "+value+" type: "+typeof(value)+"<br>")
```

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

10. Write a program that takes user input. Convert and show the input in capital letters.

```
// ASSIGNMENT
let uInput=prompt("Enter text:")
document.write("User input: "+uInput+"<br>")
document.write("Upper case: "+uInput.toUpperCase()+"<br>")
```



11. Write a program that takes user input. Convert and show the input in title case.

```
// ASSIGNMENT
let uInput=prompt("Enter text:")
document.write("User input: "+uInput+"<br>")
let titleCase=uInput.charAt(0).toUpperCase().concat(uInput.slice(1))
document.write("Title case: "+titleCase+"<br>")
```

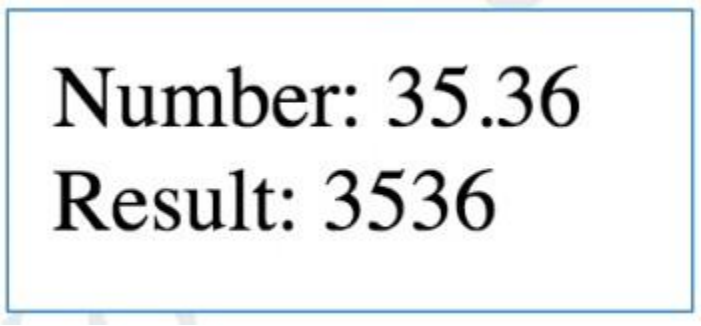
User input: javascript
Title case: Javascript

12. Write a program that converts the variable **num** to string.

var num = 35.36 ;

Remove the dot to display “3536” display in your browser.

```
// ASSIGNMENT
var num = 35.36 ;
document.write("Number: "+num+"<br>")
num=num.toString().replace(".","")
document.write("Result: "+num)
```

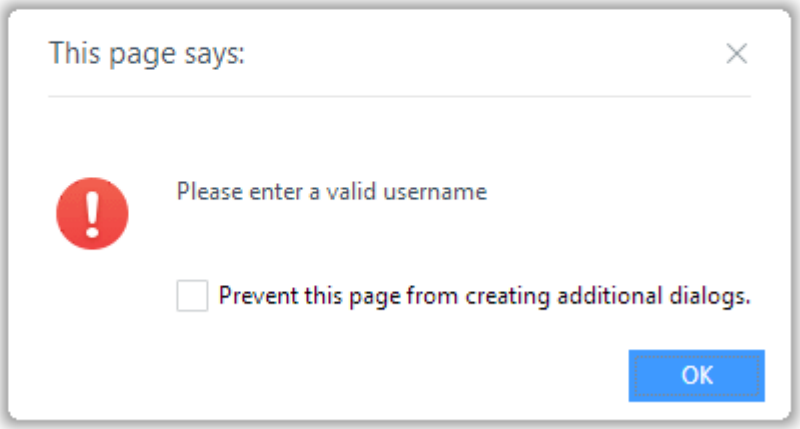


13. Write a program to take user input and store username in a variable. If the username contains any special symbol among [@ . , !], prompt the user to enter a valid username. For character codes of [@ .

```
// ASSIGNMENT
var userName =prompt("Enter your name:")
if (userName.includes("@")||userName.includes(",")||userName.includes("!")||userName.includes(".")) {
    alert("Enter valid username")
}
```

Note:
ASCII code of ! is 33
ASCII code of , is 44
ASCII code of . is 46
ASCII code of @ is 64

cm@d



14. You have an array

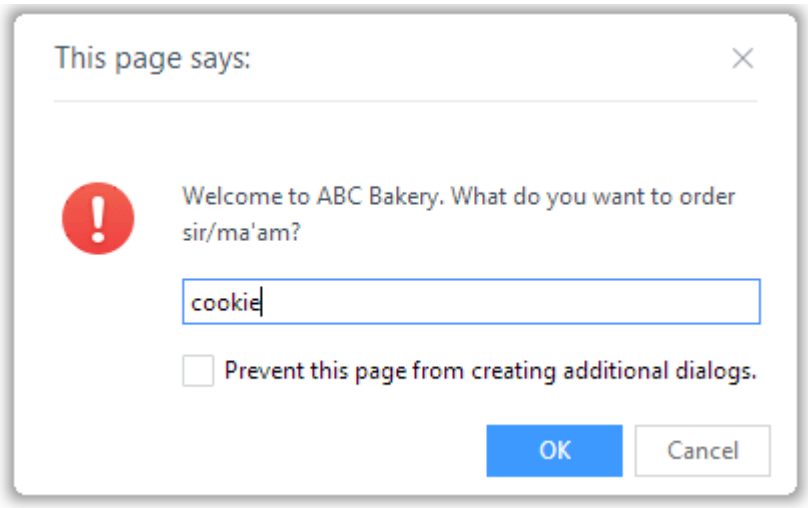
A = [cake", "apple pie", "cookie", "chips", "patties"]

Write a program to enable "search by user input" in an array. After searching, prompt the user whether the given item is found in the list or not.

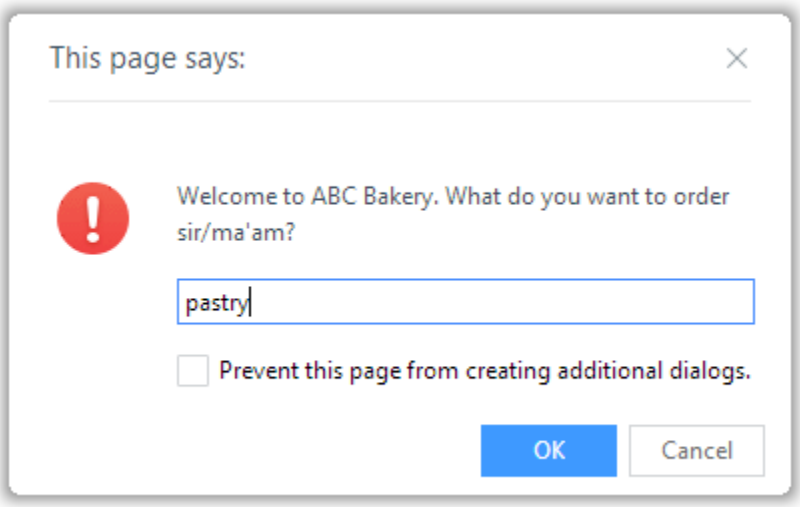
Note: Perform case insensitive search. Whether the user enters cookie, Cookie, COOKIE or coOkIE, program should inform about its availability. Example:

```
// ASSIGNMENT
let A = ["cake", "apple pie", "cookie", "chips", "patties"]
var userInput =prompt("Enter your choice:").toLowerCase();
let flag=false
for (let index = 0; index < A.length; index++) {
if (A[index]===userInput) {
    flag=true
}
}
if (flag===true) {
    alert("item found")
}
else{
    alert("item not found")

}
```



cookie is **available** at index 2 in our bakery



We are sorry. pastry is **not available** in our bakery

15. 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 6 characters long
    If the password does not meet above requirements, prompt the user to enter a valid password.
    For character codes of **a-z, A-Z** & **0-9**, refer to ASCII table at the end of this document.

```
// ASSIGNMENT
let a="abc"
a.charCodeAt
function passwordvalidity(password){
    if (password.length<6) {
        return false;
    }
    if (password.charCodeAt(0)>=48 && password.charCodeAt(0)<=57) {
        return false;
    }
    let containsAlpha=false;
    let containsNum=false;
    for (let i = 0; i < password.length; i++) {
        if (password.charCodeAt(i)>=65 && password.charCodeAt(i)<=90 || password.charCodeAt(i)>=97 && password.charCodeAt(i)<=122) {
            containsAlpha=true;
        }
        if (password.charCodeAt(i)>=48 && password.charCodeAt(i)<=57) {
            containsNum=true
        }
    }
    if (containsAlpha&&containsNum) {
        return true
    }
    else{
        return false
    }
}
let pass=prompt("Enter valid password:")
while(!passwordvalidity(pass)){
    pass=prompt("Enter password:")
}
alert("valid password")
```

Entered password: 123cmad
Password can not begin with a number
Please enter a valid password

16. Write a program to convert the following string to an array using string split method.
var university = "University of Karachi";
Display the elements of array in your browser.

```
// ASSIGNMENT
var university = "University of Karachi";
university=university.split("")
for (let index = 0; index < university.length; index++) {
document.write(university[index]+"<br>")
}
```

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17. Write a program to display the last character of a user input.

```
// ASSIGNMENT
let userInput=prompt("Enter your text:")
alert("The last character is : "+userInput.charAt(userInput.length-1))
```

```
User input: Pakistan
Last character of input: n
```

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

```
// ASSIGNMENT
let text="The quick brown fox jumps over the lazy dog"
let count=0;
text=text.split(" ")
for (let index = 0; index < text.length; index++) {
 if (text[index].toLowerCase()==="the") {
    count++;
 }
}
alert(count)
```

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