

## **Changing case**

1. Write a program that takes user input. Convert and show the input in capital letters.
2. Write a program that takes user input. Convert and show the input in title case.

## **Strings: measuring length and extracting parts**

1. 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.
2. Write a program to display the last character of a user input.

## **Strings: finding segments**

1. Write a program to find the index of letter “n” in the word “Pakistani” and display the result in your browser.
2. 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.
3. 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.

## **Strings: finding a character at a location**

1. Write a program to find the character at 3<sup>rd</sup> index in the word “Pakistani” and display the result in your browser.

## **Strings: replacing characters**

1. Write a program to replace the “Hyder” to “Islam” in the word “Hyderabad” and display the result in your browser.
2. 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.";
```

## **Rounding numbers**

1. Write a program that takes a positive integer from user & display the following in your browser.
  - a. number (example number: 3.45214)
  - b. round off value of the number
  - c. floor value of the number
  - d. ceil value of the number
  
2. Write a program that takes a negative floating point number from user & display the following in your browser.
  - a. Number (example number: -2.678 )
  - b. round off value of the number
  - c. floor value of the number
  - d. ceil value of the number

## **Generating random numbers**

1. Write a program that simulates a dice using random() method of JS Math class. Display the value of dice in your browser.
2. Write a program that simulates a coin toss using random() method of JS Math class. Display the value of coin in your browser.  
**2 = Heads and 1 = Tails**
3. Write a program that stores a random secret number from 1 to 10 in a variable. Ask the user to input a number between 1 and 10. If the user input equals the secret number, congratulate the user.

## **Converting strings to integers and decimals**

1. Write a program that asks the user about his weight. Parse the user input and display his weight in your browser.  
Possible user inputs can be:
  - a. 50
  - b. 50kgs
  - c. 50.2kgs

d. 50.2kilograms

## **Converting strings to numbers, numbers to strings**

1. Write a program that converts a string "472" to a number 472.  
Display the values & types in your browser.  
Hint: (use typeof())
2. Write a program that converts the variable num to string.  
var num = 35.36 ;  
Remove the dot to display "3536" display in your browser.

## **Controlling the length of decimals**

1. Write a program to control the length of decimals to 2.  
var percentage = 30 / 45 \* 100; -> 66.66666666666666