Labwork 2 : JavaScript

Exercise 1: Write a JavaScript program to display the current day and current time in the following format

- Today is: Friday
- Current time is: 3 PM: 30: 30

Exercise 2: Write a JavaScript program to convert temperatures to and from Celsius and Fahrenheit:

- Conversion Formula: $c/5 = (f-32)/9$ where c is temperature in Celsius and f is temperature in Fahrenheit.

Exercise 3: Write a JavaScript program where the program takes a random integer between 1 to 10, the user is then prompted to input a guess number. If the user input matches with guess number, the program will display a message "Good Work" otherwise display a message "Not matched".

Exercise 4: Write a JavaScript program to find the largest of five numbers. Display an alert box to show the result.

Exercise 5: Write a JavaScript program that iterates from 1 to 15. For each iteration, it will check if the current number is odd or even, and display a message to the screen. The output should be:

"1 is odd"

"2 is even" ….

Exercise 6: Write a JavaScript program to find and print the first 10 happy numbers. A happy number is defined as follows:

Given a positive integer n. Replace n by the sum of the squares of its digits, and repeat the process until n equals 1, or it loops endlessly in a cycle which does not include 1. Those numbers for which this process ends in 1 are happy numbers, while those that do not end in 1 are unhappy numbers.

Exercise 7: Write a JavaScript function that reverse a number.

For example: Input: 4689

Output: 9864

Exercise 8: Write a JavaScript function that accepts a number as a parameter and check the number is prime or not.

A prime number (or a prime) is a natural number greater than 1 that has no positive divisors other than 1 and itself.

Exercise 9: Write a JavaScript function which will take an array of numbers stored and find the second lowest and second greatest numbers.

For example: Input: array[1,2,3,4,5]

Output: 2 and 4

Exercise 10: Use HTML/CSS/ JavaScript to create a form as the following.

Sign Up

Username:

Password:

Re-type Password:

Reset   Submit

Write a JavaScript function that checks whether two entered passwords are identical. The function is called when users click the "Submit" button.

Exercise 11: Write a JavaScript program to calculate multiplication and division of two numbers:

- HTML form should be used to get inputs from user
- The interface of the program should look as follows:

Multiply and Divide two numbers:

1st Number :

2nd Number:

Multiply   Divide

The Result is :

Note: You need to submit the source codes of your lab works to the google drive folder of the course.