

# Homework 8

1. Write a Javascript program that prints out the first 30 numbers in a fibonacci sequence which begins with 0, 1, ... (Fibonacci number - [https://en.wikipedia.org/wiki/Fibonacci\\_number](https://en.wikipedia.org/wiki/Fibonacci_number)).

2. Write a Javascript program that gets the three lengths of the edge of a cuboid on the prompt window. Calculate three surface areas and a volume of the cuboid. Output format is as below.

Let  $a$ ,  $b$ ,  $c$  be each of the three lengths of edges of a cuboid.

*(Surface areas of a cuboid)*  $= \{a \times b, b \times c, c \times a\}$

*(Volume of a cuboid)*  $= a \times b \times c$

The given lengths of edge of a cuboid is  $a-b-c$ . The surface area is  $x-y-z$  and the volume is  $v$ .

3. Write a Javascript program that make a reverse ordered array using `pop()` and `push()` function from an array that store any ten name of colors. Print the seven of very first elements of reversed array in a row.

Use: `colors = ["red", "orange", "yellow", "green", "blue", "navy", "purple", "sky blue", "brown", "grey"];`

4. Write a Javascript program that get a positive integer on prompt window (if the input is not a positive integer, throw a message as alert and ask the number again) and factorize it. Print the given input number and enumerate the factors in descending order.

Explorer 사용자 프롬프트

스크립트 프롬프트:

Input the first length of the edge,

10

확인 취소

Explorer 사용자 프롬프트

스크립트 프롬프트:

Input the second length of the edge,

20

확인 취소

Explorer 사용자 프롬프트

스크립트 프롬프트:

Input the third length of the edge,

40

확인 취소

Explorer 사용자 프롬프트

스크립트 프롬프트:

Input a positive integer

400

확인 취소

# Results

0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987  
1597 2584 4181 6765 10946 17711 28657 46368  
75025 121393 196418 317811 514229

The given lengths of edge of a cuboid is 10-20-40. The surface area is 200-800-400 and the volume is 8000.

grey brown sky blue purple navy blue green

400, 5 x 5 x 2 x 2 x 2 x 2

# Homework 8 – How to submit

- Download the template for homework from class board in HisNet, and write report. The report should include
  - ‘Codes with comments’ and ‘Screen shot of the result’.
- Submit ‘report (in pdf)’ and ‘codes’ in zip file. Please follow the file naming rule.  
*HW8\_(Student Number)\_(Name).zip*  
*ex: HW8\_201101234\_HongGilDong.zip*
- Upload it to HisNet.
- Deadline: **11.8 (Wednesday), 23:00**