

## ECS417U Lab sheet for week 9

### Exercise 1

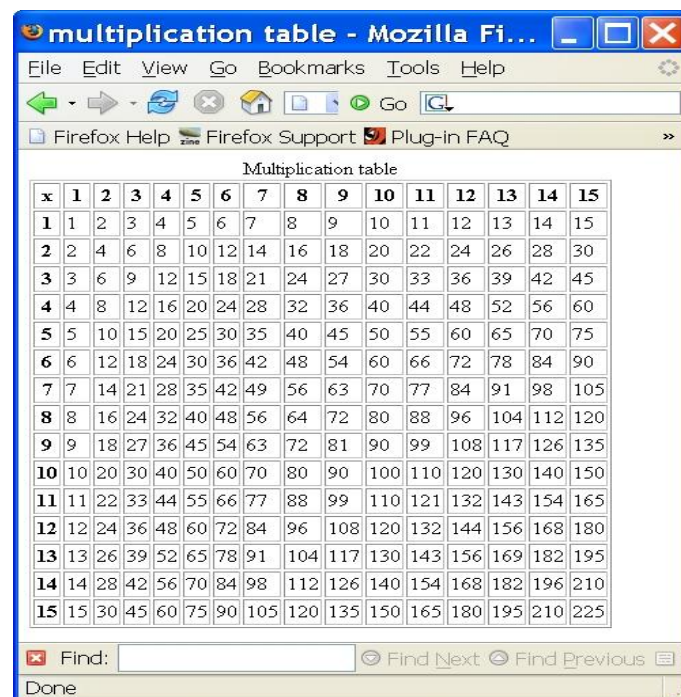
Write a PHP script to detect the type of browser used to display the script. The information about the browser being used can be found in the value of a special reserved PHP variable (more accurately an array element) `$_SERVER['HTTP_USER_AGENT']`. You need to use a built-in PHP string function to check for three keywords in `$_SERVER['HTTP_USER_AGENT']`: 'MSIE', 'Firefox' and 'Chrome'. If 'MSIE' is found, output "you are using Microsoft Internet Explorer"; If 'Firefox' is found, output "you are using Mozilla Firefox"; If 'Chrome' is found, output "you are using Google Chrome"; If none of the three is found, output "you are using a browser other than Microsoft Internet Explorer, Mozilla Firefox and Google Chrome". See <http://www.useragentstring.com/pages/useragentstring.php> for a list of User Agent Strings for different browsers.

### Exercise 2

Write, test, and debug (if necessary) a PHP function which takes an array of numbers as parameter and return the average and median of the parameter array.

### Exercise 3

Write a PHP script to create a multiplication table as below:



The screenshot shows a Mozilla Firefox browser window titled "multiplication table - Mozilla Fi...". The browser's address bar is empty, and the page content displays a multiplication table. The table has 15 rows and 15 columns, with the first column labeled 'x' and the first row labeled '1' through '15'. The table is titled "Multiplication table" and contains the following data:

x	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
3	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
4	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60
5	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75
6	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90
7	7	14	21	28	35	42	49	56	63	70	77	84	91	98	105
8	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120
9	9	18	27	36	45	54	63	72	81	90	99	108	117	126	135
10	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
11	11	22	33	44	55	66	77	88	99	110	121	132	143	154	165
12	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180
13	13	26	39	52	65	78	91	104	117	130	143	156	169	182	195
14	14	28	42	56	70	84	98	112	126	140	154	168	182	196	210
15	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225