SWITCH STATEMENTS AND WHILE… DO-WHILE LOOPS

Assignment # 39-42

JAVASCRIPT

MODULE A - Mobile & Cloud Computing

| SWITCH STATEMENTS | WHILE… DO-WHILE LOOPS |

DO THE FOLLOWING EXERCISES USING SWITCH STATEMENTS:

1. Write a switch statement with the following condition:
   If the variable age is greater than 18, output "Old enough", otherwise output "Too young".

2. Write a program to check whether the given input number is divisible by 3 or not by using Switch Case statements. Show a message “Number is not divisible by 3” or “Number is divisible by 3”.

3. Write a program to create a calculator for +, -, *, /, % using switch case statements. (number1, number2 and operator will be input)

4. The getDay() method returns the weekday as a number between 0 and 6. (Sunday=0, Monday=1, Tuesday=2 ...).
   Use the weekday number to calculate weekday name.

5. The getDay() method returns the weekday as a number between 0 and 6. (Sunday=0, Monday=1, Tuesday=2 ...).
   If today is neither Saturday (6) nor Sunday (0), write a default message:

6. Given the following script

```
function checkCar() {
    var text;
    var favCar = prompt("What is your favorite
car?");
    switch(favCar) {
        //Add code here
    }
    document.write( text);
}
checkCar();
```

Finish the switch statement. Add the following cases: **BMW**, **Ford** and **Peugeot**.
Set the value of the variable **text** to: "German car" for **BMW**. "American car" for **Ford**. "French car" for **Peugeot**.
Also add a default case where the text value is "Unknown car name".

7. Fix the following switch statement:

```
function checkFruit() {
    var text;
    var fruits = prompt("Enter a fruit name");
    switch(fruits) {
        case "Banana"
            text = "Banana is good!";
        case "Orange"
            text = "I am not a fan of orange.";
        case "Apple"
            text = "How you like them apples?";
```

```
        default
            text = "I have never heard of that
fruit.";
    }
    document.write( text);
}
checkFruit();
```

8. Write a function that displays the marks range against a particular grade. For example, if grade is "B", then print **Marks [>= 60 and <70]**

9. Use a *switch* statement to rewrite the following JavaScript code. Prompt the user for the number of a month rather than setting it to 8:

```
month = 8;

if (month == 1) {
    alert("January");
}
 else if (month == 2) {
    alert("February");
}
 else if (month == 3) {
    alert("March");
}
 else if (month == 4) {
    alert("April");
}
 else if (month == 5) {
    alert("May");
}
else if (month == 6) {
    alert("June");
}
 else if (month == 7) {
    alert("July");
}
else if (month == 8) {
    alert("August");
}
else if (month == 9) {
    alert("September");
}
else if (month == 10) {
    alert("October");
}
else if (month == 11) {
    alert("November");
}
else if (month == 12) {
    alert("December");
}
else{
    alert("Invalid month");
}
```


10. Use a **conditional (ternary) operator** for this exercise:
If the variable age is a value below 18, the value of the variable voteable should be "Too young",
otherwise the value of voteable should be "Old enough".

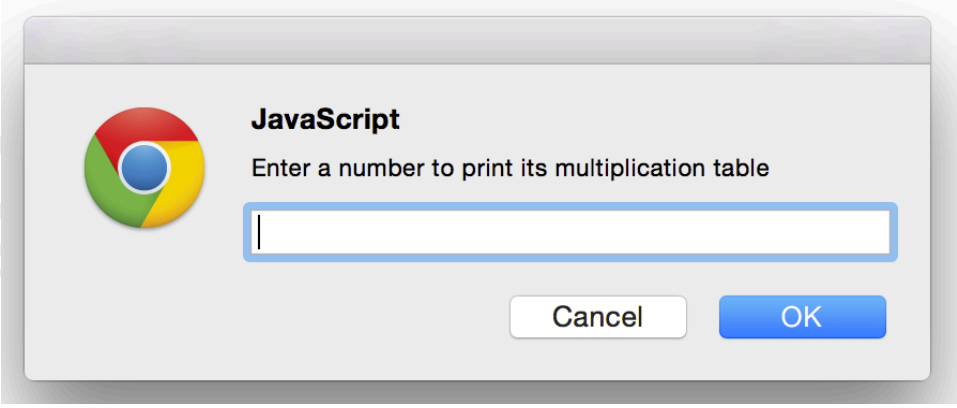
DO THE FOLLOWING EXERCISES USING WHILE & DO-WHILE LOOPS:

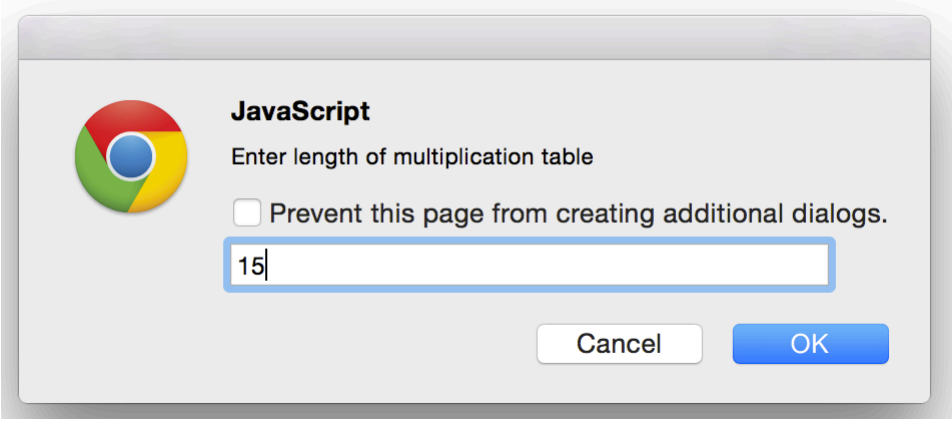
11. Write a program to display the message “Hello World” 5 times in your browser.

12. Write a program to print numeric counting from 1 to 10.

```
1
2
3
4
5
6
7
8
9
10
```

13. Write a program to print multiplication table of any number using. Table number & length should be taken as an input from user.





Multiplication table of 2
Length 15

2 x 1 = 2
2 x 2 = 4
2 x 3 = 6
2 x 4 = 8
2 x 5 = 10
2 x 6 = 12
2 x 7 = 14
2 x 8 = 16
2 x 9 = 18
2 x 10 = 20
2 x 11 = 22
2 x 12 = 24
2 x 13 = 26
2 x 14 = 28
2 x 15 = 30

14. You have an array
A = [“Nokia”, “Samsung”, “Apple”, “Sony”, “Huawei”]
Write each element on new line.

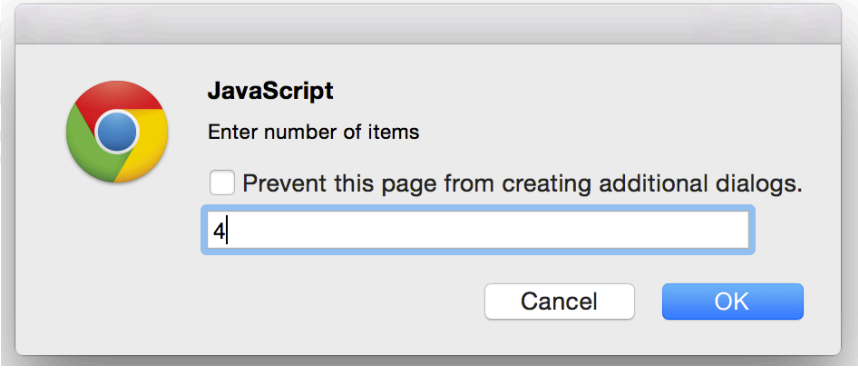
```
Nokia
Samsung
Apple
Sony
Huawei
```

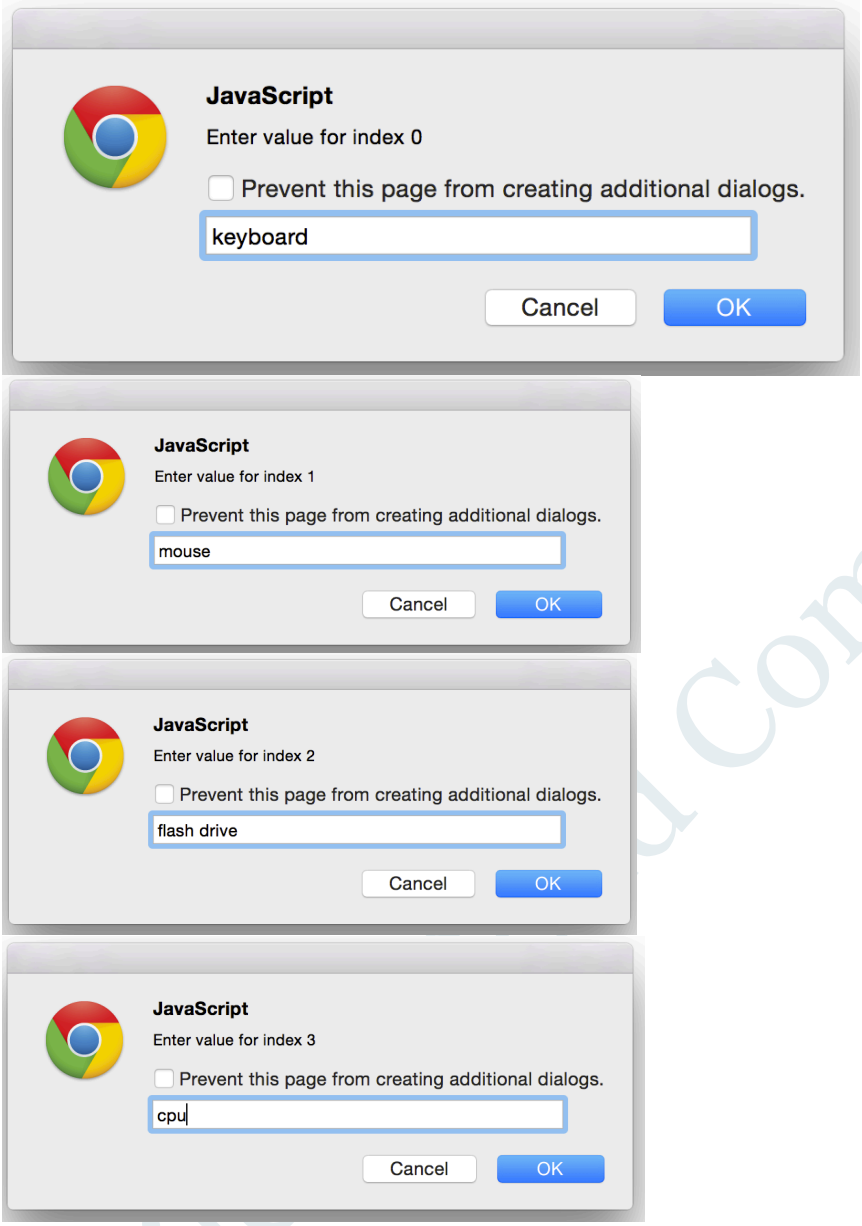
15. Write a program to print items of the following array:
fruits = [“apple”, “banana”, “mango”, “orange”, “strawberry”]

```
apple
banana
mango
orange
strawberry

Element at index 0 is apple
Element at index 1 is banana
Element at index 2 is mango
Element at index 3 is orange
Element at index 4 is strawberry
```

16. Write a program to initialize an array of N items by using prompt. Where N is number of items as entered by the user.





```
Number of items: 4
Items:

keyboard
mouse
flash drive
cpu
```

17. Generate the following series in your browser. See example output.
    a. Counting: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
    b. Reverse counting: 10, 9, 8, 7, 6, 5, 4, 3, 2, 1
    c. Even: 0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20
    d. Odd: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19
    e. Series: 2k, 4k, 6k, 8k, 10k, 12k, 14k, 16k, 18k, 20k

Counting:

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15,

Reverse counting:

10, 9, 8, 7, 6, 5, 4, 3, 2, 1,

Even:

0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20,

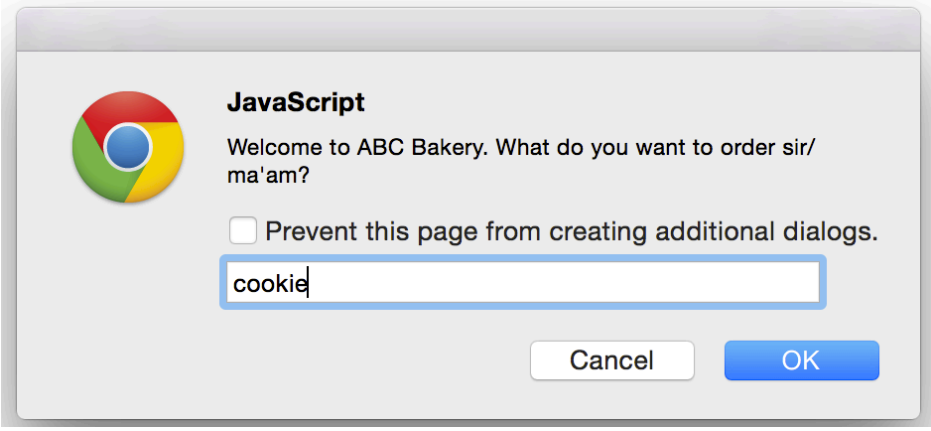
Odd:

1, 3, 5, 7, 9, 11, 13, 15, 17, 19,

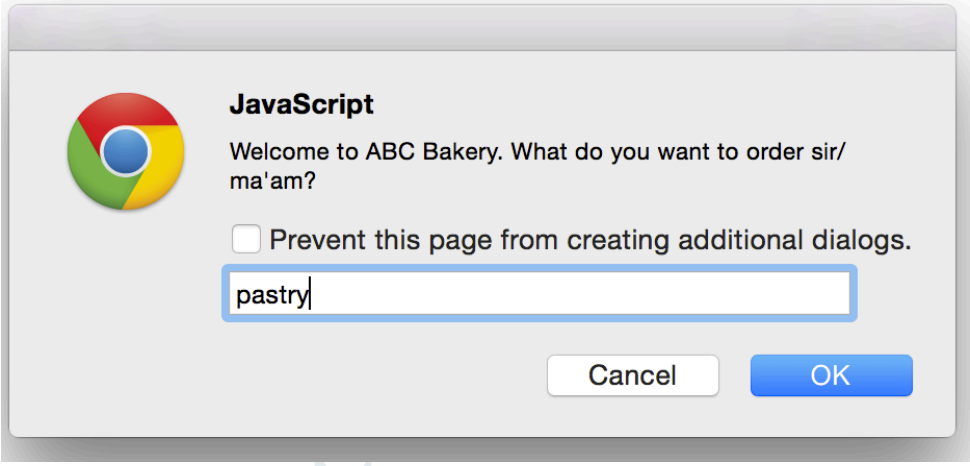
Series:

2k, 4k, 6k, 8k, 10k, 12k, 14k, 16k, 18k, 20k,

18. 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. Example:



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



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

19. You have given the following arrays:

```
var students = ["Ali", "Sami", "Taha", "Inam"];
var scores  = [58, 73, 89, 90];
```

Write a program to generate the following HTML table in your browser using JS.

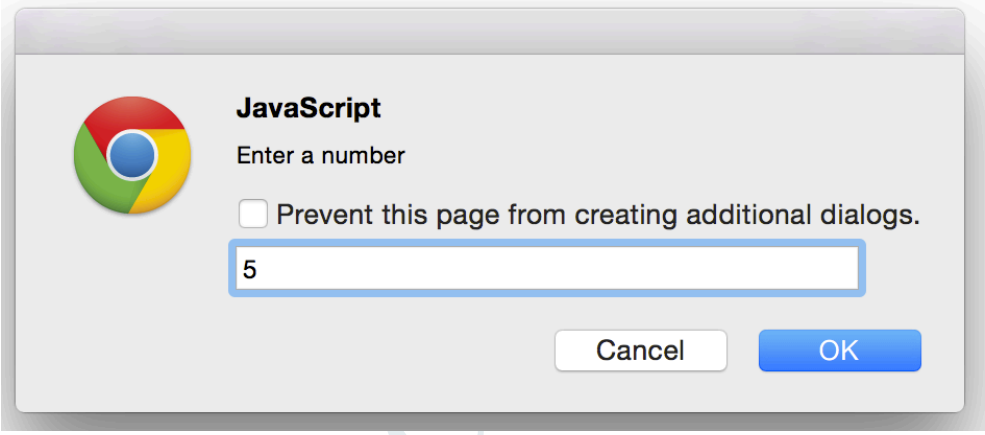
Students	Scores
Ali	58
Sami	73
Taha	89
Inam	90

20. Write a program that prints number from start of the array to desired stop value. Given array:
var scores = [12, 45, 3, 22, 34, 50];
(Hint: take stop value from user)
E.g. if user gives 3 as input value print 12, 45, 3
if user gives 34 as input value print 12, 45, 3, 22, 34

21. You have an array
A = [[1,2,3] , [4,5,6] , [7,8,9]]
Write each element on new line with the help of nested loops.

```
1 2 3
4 5 6
7 8 9
```

22. Write a program to repeatedly print the value of the variable **num** which is input by user. Value should be decreasing by 0.5 each time, as long as x Value remains positive.




```
5, 4.5, 4, 3.5, 3, 2.5, 2, 1.5, 1, 0.5, 0,
```

23. **The even/odd reporter**
Write a loop that will iterate from 0 to 20. For each iteration, it will check if the current number is even or odd, and report that to the screen (e.g. "2 is even").

```
0 is even
1 is odd
2 is even
3 is odd
4 is even
5 is odd
6 is even
7 is odd
8 is even
9 is odd
10 is even
11 is odd
12 is even
13 is odd
14 is even
15 is odd
16 is even
17 is odd
18 is even
19 is odd
20 is even
```

24. Write a program to calculate the product of the odd integers from 1 to 7.

```
The product of the odd integers from 1 to 7 is 105
```

25. Write a program that will write out a wedge of stars. The user will enter the initial number of stars, and the program will write out lines of stars where each line has one few star than the previous line. Initial number of stars: 7

```
*******
******
*****
****
***
**
*
```

26. Write a program to create the following patterns in your browser. Take number of lines as an input.

a.
```
*****
*****
*****
*****
```

b.
```
*
**
***
****
*****
```

c.
```
*****
****
***
**
*
```

-- END --