

## HW2

دورة مكتب ٣٤ (فرانت)      مصطفى جمالى

(١) تبدیل درجه سلیسیوس به فارنهایت:

```
let T = prompt("input a Celsius degree temperature:" , "");  
alert(`The Farenheit temperature is: ${T*(9/5)+32}`);
```

```
> let T = prompt("input a Celsius degree temperature:" , "");  
console.log(`The Farenheit temperature is: ${T*(9/5)+32}`);
```

(٢) تبدیل اینچ به متر:

```
let a = prompt("input a inches number:" , "");  
alert(`The meteric number is: ${((2.54*a)/100)}`);
```

```
> let a = prompt("input a inches number:" , "");  
alert(`The meteric number is: ${((2.54*a)/100)}`);
```

(٣) تبدیل میلی ثانیه به ثانیه، دقیقه، ساعت، روز، ماه و ...:

```
function convertMS( milliseconds ) {  
    var year, month, day, hour, minute, seconds , millisecond;
```

```
    millisecond = Math.floor(millisecond / 1000);  
    seconds = seconds % 1000;  
    seconds = Math.floor(milliseconds / 1000);  
    millisecond = milliseconds % 1000;  
    minute = Math.floor(seconds / 60);  
    seconds = seconds % 60;  
    hour = Math.floor(minute / 60);
```

```

minute = minute % 60;
day = Math.floor(hour / 24);
hour = hour % 24;
month = Math.floor(day / 30);
day = day % 30;
year = Math.floor(month / 12);
month = month % 12;
return (
    year+" year "+month+" month "+ day+" day "+hour+" hour "+minute+" minute "+seconds+
seconds "+millisecond+" millisecond"
);
}

console.log(convertMS());
> function convertMS( milliseconds ) {
    var year, month, day, hour, minute, seconds , millisecond;

    millisecond = Math.floor(milliseconds / 1000);
    seconds = seconds % 1000;
    seconds = Math.floor(milliseconds / 1000);
    millisecond = milliseconds % 1000;
    minute = Math.floor(seconds / 60);
    seconds = seconds % 60;
    hour = Math.floor(minute / 60);
    minute = minute % 60;
    day = Math.floor(hour / 24);
    hour = hour % 24;
    month = Math.floor(day / 30);
    day = day % 30;
    year = Math.floor(month / 12);
    month = month % 12;
    return (
        year+" year "+month+" month "+ day+" day "+hour+" hour "+minute+" minute "+seconds+
seconds "+millisecond+
millisecond"
    );
}
console.log(convertMS());

```

:BMI محاسبه شاخص (۴

```
let weight = prompt("input weight (in kg):" , "");
```

```

let height = prompt("input height(in m):" , "");
let BMI = weight/(height*height)
alert(`The BMI is: ${BMI.toFixed(1)}`);

> let weight = prompt("input weight (in kg):" , "");
let height = prompt("input height(in m):" , "");
let BMI = weight/(height*height)
alert(`The BMI is: ${BMI.toFixed(1)}`);

```

(۵) سورت (مرتب) کردن ۱۵ عدد گرفته شده از ورودی:

```

let Array=[];
for (let i=0 ; i<15 ; i++){
var num= prompt("input a number","");
Array.push(num);
}
alert(Array.sort());

```

```

> let Array=[];
for (let i=0 ; i<15 ; i++){
var num= prompt("input a number","");
Array.push(num);
}

alert(Array.sort());

```

(۶) ساخت الماسی از ستاره‌ها:

```

function diamond(arg) {
if(arg === 1) {return "*"}
var str = ""
for(var i = 1 ; i <= arg+1; i++) {

```

```

str += Array(i).join('*') + '\n'
}

for(var j = arg ; j > 1; j--) {
    str += Array(j).join('*') + '\n'
}

return str
}

alert(diamond(7))

> function diamond(arg) {
    if(arg === 1) {return "*"}
    var str = ""
    for(var i = 1 ; i <= arg+1; i++) {
        str += Array(i).join('*') + '\n'
    }
    for(var j = arg ; j > 1; j--) {
        str += Array(j).join('*') + '\n'
    }
    return str
}
alert(diamond(7))

```

(۷) جمع مقدار یک آرایه:

```

let arr = [1, 2, 3, 4, 5];

let result = arr.reduce((sum, current) => sum + current);

alert( result );

> let arr = [1, 2, 3, 4, 5];
let result = arr.reduce((sum, current) => sum + current);
alert( result );

```

(۸) کدگذاری سزار:

```
let inputArray = [];
for(let i=0; i<10; i++) {
    inputArray[i] = prompt("enter a character:","");
}
let num = prompt("enter a number:","");
for (let j=0 ; j<num ; j++){
    inputArray.push(inputArray.shift())
}
alert(inputArray);
```

```
> let inputArray = [];
  for(let i=0; i<10; i++) {
      inputArray[i] = prompt("enter a character:","");
  }
  let num = prompt("enter a number:","");
  for (let j=0 ; j<num ; j++){
      inputArray.push(inputArray.shift())
  }
  alert(inputArray);
```

(۹) کشف (decode) کد مربوط به کدگذاری سزار:

```
let inputArray = [];
for(let i=0; i<10; i++) {
    inputArray[i] = prompt("enter a character:","");
}
let num = prompt("enter a number:","");
```

```
for (let j=0 ; j<num ; j++){  
    inputArray.unshift(inputArray.pop())  
}  
alert(inputArray);
```

```
> let inputArray = [];  
for(let i=0; i<10; i++) {  
  
    inputArray[i] = prompt("enter a character:", "");  
}  
let num = prompt("enter a number:", "");  
for (let j=0 ; j<num ; j++){  
    inputArray.unshift(inputArray.pop())  
}  
alert(inputArray);
```

١٠) تبدیل عدد به حروف: