REPORT FRAMEWORK BASED PROGRAMMING
WEEK 1

By :

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PROGRAM STUDI D-IV TEKNIK INFORMATIKA
JURUSAN TEKNOLOGI INFORMASI
POLITEKNIK NEGERI MALANG

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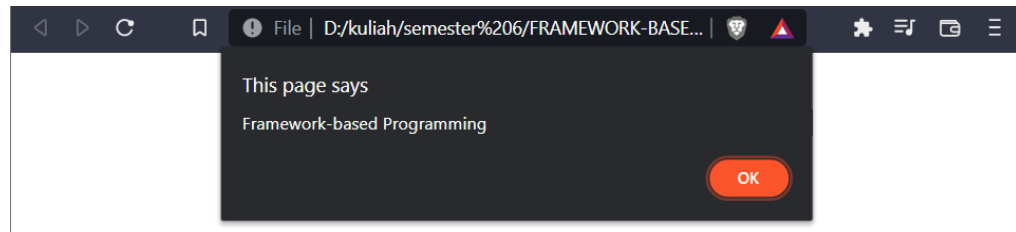EXPERIMENT

a. Const variable its mean the value of that variable cannot be changed

```
1    const name = "Framework-based Programming";
2    alert(name);
```
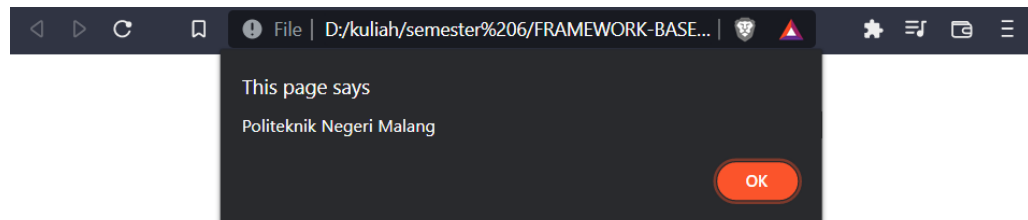
Result

b. Let variable is dynamic variable so you can change the value after you define it.

```
1    if(true){
2        let name = 'Framework-based Programming';
3        name = 'Politeknik Negeri Malang';
4        alert(name);
5    }
```
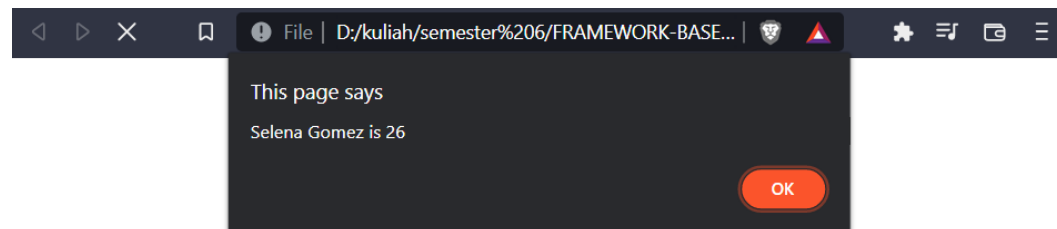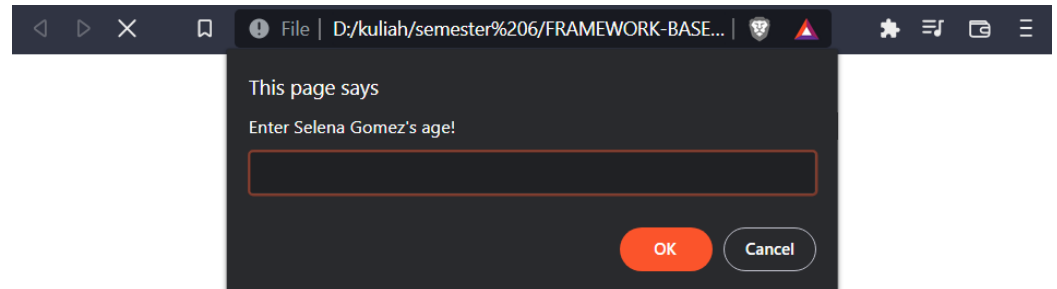
Result

c. This is the template that we can save/set a value to our variable. We can set the output too so that why we call it as template.

```javascript
let fname = 'Selena';
let lname = 'Gomez';
let age = prompt("Enter Selena Gomez's age!");

let result = `${fname} ${lname} is ${age}`;
alert(result);
```
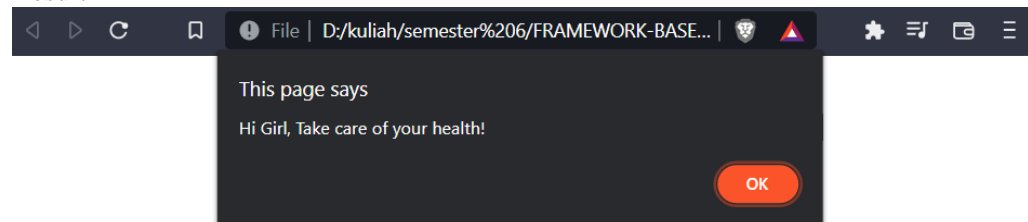
Result

d. In this case we using function with name welcome. Welcome function already have value on its parameter so we can call it without sending any parameters.

```javascript
function welcome(user = 'Girl', message='Take care
of your health!'){
    alert(`Hi ${user}, ${message}`);
}
welcome();
```
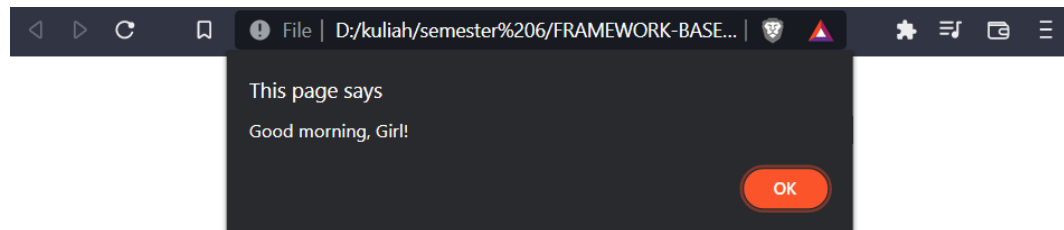
Result

e. This is easier way how to write a function using arrow.

```
1   let greeting = message =>alert(`${message} Girl!`);
2
3   greeting('Good morning,');
```
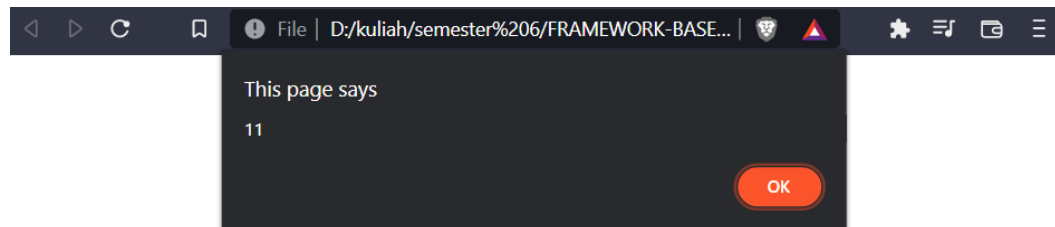
Result

f. Same as before but this is used to function that need a return.

```
1   const func = (a, b) => {
2       return a+b;
3   };
4   alert(func(8, 3));
```
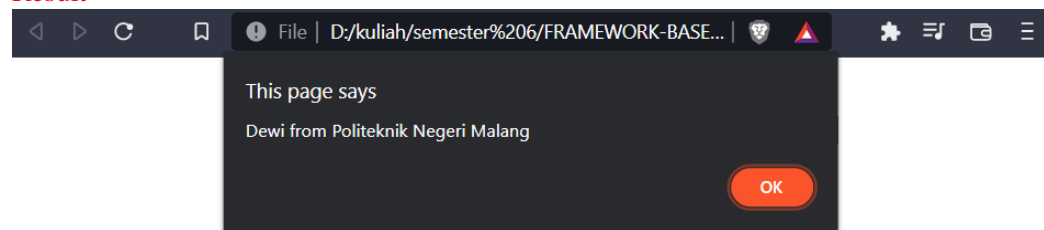
Result

g. At the first we make an object with the name student and then we can use it by call the object then fill the parameters requirement.

```
1   let student = ({name, university}) => {
2       alert(`${name} from ${university}`);
3   };
4
5   student({
6       name: 'Dewi',
7       university: 'Politeknik Negeri Malang'
8   });
```

Result

This page says

Dewi from Politeknik Negeri Malang

OK
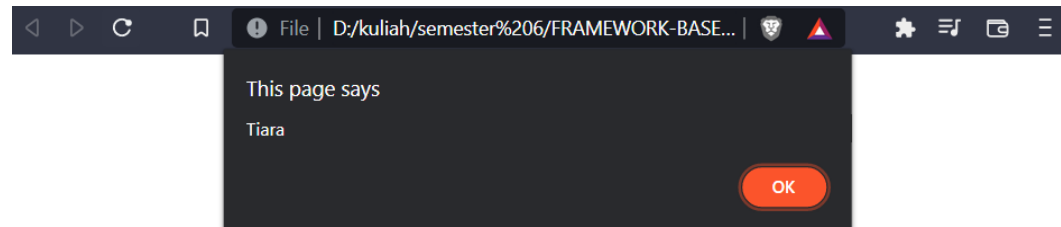
h. This is an array that we can define value from each index to the more than one variable.

```
1   let [,,friends] = ['Ratna', 'Bunga', 'Tiara'];
2   alert(friends);
```
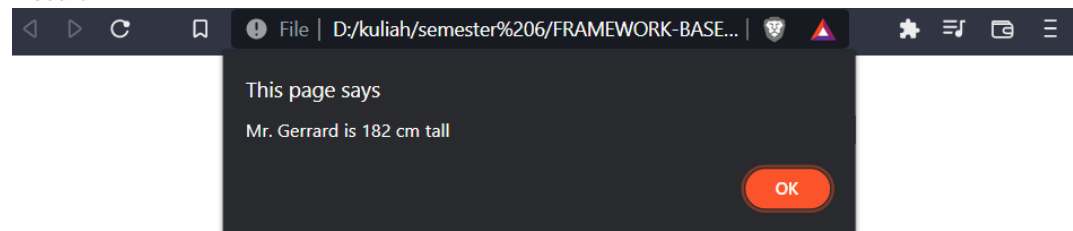
Result

This page says

Tiara

OK

i. We can write a method inside the object. In this example, inside object footballPlayer we have a method output. So we can call that method after we use the object.

```
var footballPlayer = {
    name: 'Gerrard',
    height: '182',
    output(){
        alert(`Mr. ${this.name} is ${this.height} cm tall`)
    }
};

footballPlayer.output();
```
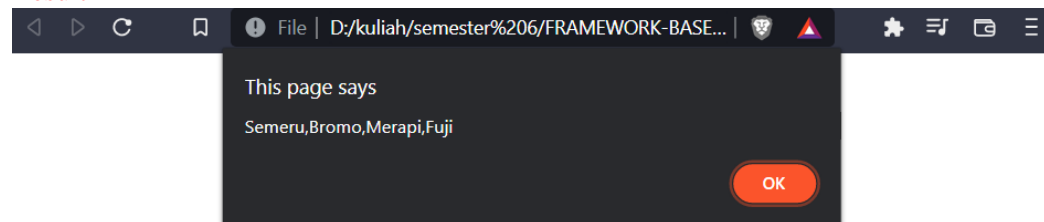
Result

j. This is how we can save a multiple value inside one variable. We merged the 2 array to the one variable.

```
var mountains = ['Semeru','Bromo','Merapi'];
var mountainsFromJapan = ['Fuji'];

var allMountains = [...mountains,...mountainsFromJapan];
alert(allMountains);
```
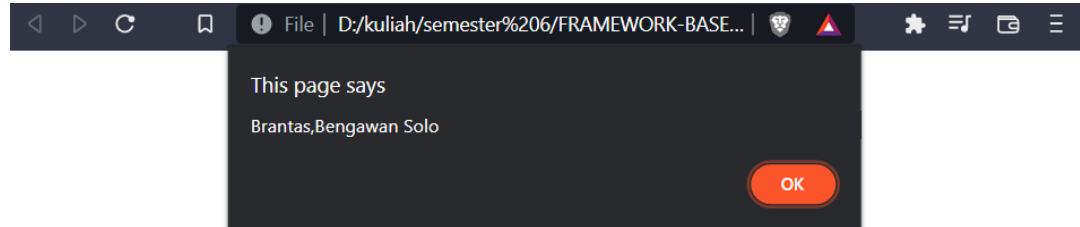
Result

k. Inside of array we can separate it to some variable. We can use triple dot (…) with the name of variable to call all value inside array from that index when we use triple dot until last index.

```
1   var rivers = ['Ciliwung', 'Brantas', 'Bengawan Solo'];
2   var [first, ...rest] = rivers;
3   alert(rest);
```

Result

This page says

Brantas,Bengawan Solo

OK

l. This is a one of example of object oriented programming using javascript. We can use an Extends operation too using javascript for oop concept.

```javascript
class Holiday{
    constructor(destination, days){
        this.destination = destination;
        this.days = days;
    }
    info(){
        alert(`${this.destination} will take ${this.days} days`);
    }
}

class Expedition extends Holiday{
    constructor(destination, days, gear){
        super(destination, days);
        this.gear = gear;
    }

    info(){
        super.info();
        alert(`Bring your ${this.gear.join(' and your ')}`)
    }
}

const tripWithGear = new Expedition('Semeru', 10, ['Sunglasses','Flags',
'Camera']);
tripWithGear.info();
```

Result

This page says

Semeru will take 10 days

OK

This page says

Bring your Sunglasses and your Flags and your Camera

OK