

Program No:	4
Roll No :	1534
Title of Program :	Lab 6 : To demonstrate events and event emitter class B1
Objective :	

Source code:

```
var e = require('events');
var event = new e.EventEmitter();
function CreateFile() {
  console.log("creating a file");
}
```

```
function Read() {
  console.log("Reading a file");
```

```
}
function write(){
  console.log("writing a file");
}
```

```
event.addListener("IOoperations",write);
event.addListener("IOoperation",Read);
event.once("CreateIO",CreateFile);
console.log(event.listenerCount("CreateIO "));
event.emit("CreateIO");
event.emit("IOoperations");
event.emit("IOoperations");
console.log(event.rawListeners("IOoperations")); // this will function
console.log(event.listenerCount("IOoperation"));
event.removeListener("IOoperations",Read);
event.emit("IOoperations");
console.log(event.listenerCount("IOoperations"));
event.emit("CreateIO");
console.log(event.listenerCount("createIO"));
```

OUTPUT:

```
PS C:\Users\mcamock\web> node events1.js
0
creating a file
writing a file
writing a file
[]
1
writing a file
1
0
PS C:\Users\mcamock\web> 
```

ARRAY:

SOURCE CODE:

```
var e = require('events');
var event = new e.EventEmitter();
var A = [7,2,5,4,3,6];
var st = ['a','v','o','i','r'];
function sortarray()
{
    console.log("Array before Soring");
    console.log(st);
    st.sort();
    console.log("Array after sorting");
    console.log(st);
}
function sumofevenelements()
{
    var sum = 0;
    for(i=0;i<A.length;i++)
    {
        if(1%2==0) sum += A[i];
    }
    console.log("Sum of odd elements in array is : "+sum);
}
var searcharray = function (ch)
{
    flag = false;
```

```
for (i=0;i<st.length;i++)
{
    if(st[i]==ch) {flag=true ;
    break;}

    if(flag) console.log(ch + "is found");
    else console.log(ch+"is not found");
}
}
event.addListener("sort",sortarray);
event.on("sumeven",sumofevenelements);
event.on("sumodd", sumofevenelements);
event.on("search",searcharray);
event.emit("sort");
event.emit("sumodd");
event.emit("sumeven");
event.emit("search",'F');
```

OUTPUT:

```
PS C:\Users\mcamock\web> node .\array.js
Array before Soring
[ 'a', 'v', 'o', 'i', 'r' ]
Array after sorting
[ 'a', 'i', 'o', 'r', 'v' ]
Sum of odd elements in aray is : 0
Sum of odd elements in aray is : 0
Fis not found
Fis not found
Fis not found
Fis not found
Fis not found
PS C:\Users\mcamock\web> |
```

TEA

```
source code: var e = require('events');
var event = new e.EventEmitter();
function Tea() {
  console.log("Making Tea");
  event.emit("gason");
}

event.addListener("tea",Tea);
function gason () {
  console.log("put the gas on ....");
  event.emit("boilwater");
}

event.addListener("gason",gason);
function boilwater() {
  console.log("let the water boil");
  event.emit("addtea");
}

event.addListener("boilwater",boilwater);
function addtea() {
  console.log("adding tea leaves in the water");
  event.emit('milkandsugar');
}

event.addListener("addtea",addtea);
function milkandsugar() {
  console.log("Adding milk and sugar");
  console.log("tea is ready");
}

event.addListener("milkandsugar",milkandsugar);
event.emit("tea");
```

OUTPUT:

```
PS C:\Users\mcamock\web> node .\events2.js
Making Tea
put the gas on ....
let the water boil
adding tea leaves in the water
Adding milk and sugar
tea is ready
PS C:\Users\mcamock\web> |
```