

Assignment No	6
Title	To create events with parameterised and arrow function
Objective	A) Events associated with Functions to sort an array and search for particular element using parameters B) Events to display Customer Information using parameter C) Events to perform Calculator operations using arrow functions D) Events to calculate salary using arrow functions
Roll No	MCA2511

#### **CODE & OUTPUT:**

A) Events associated with Functions to sort an array and search for particular element using parameters.

```
eventsortarray.js:
var e = require('events');
var evmt = new e.EventEmitter();
var A = [7,2,5,4,3,6];
var st = ['a','v','e','d'];

function sortarray()
{
    console.log("Array before Sorting");
    console.log(st);
    console.log(A);
    st.sort();
    A.sort();
    console.log("Array before Sorting");
    console.log(st);
    console.log(A);
}

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");

}

evmt.addListener("sort", sortarray);
evmt.on("search", searcharray);
evmt.emit("sort");
evmt.emit("search", 'e');

```

**Output:**

```

PS A:\MCA2511\WEB_LAB\node.js> node eventsortarray.js
Array before Sorting
[ 'a', 'v', 'e', 'd' ]
[ 7, 2, 5, 4, 3, 6 ]
Array before Sorting
[ 'a', 'd', 'e', 'v' ]
[ 2, 3, 4, 5, 6, 7 ]
e is found
PS A:\MCA2511\WEB_LAB\node.js> []

```

B) Events to display Customer Information using parameter.

**eventhandlingcustomers2.js:**

```

var e =require('events');
var evmt = new e.EventEmitter();
var customerinfo = function(code,cname,city,email)
{
    console.log(`Customer No ${code}`);
    console.log(`Customer Name ${cname}`);
    console.log("City " + city);
    console.log("email ID "+ email);
}

```

```
evmt.on("customerinfo",customerinfo);
evmt.emit("customerinfo", 1, "MG", "Thane", "mg@mail.com");
evmt.emit("customerinfo", 2, "MG2", "Thane2", "mg2@mail.com");
```

**Output:**

```
PS A:\MCA2511\WEB_LAB\node.js> node eventhandlingcustomer2.js
Customer No 1
Customer Name MG
City Thane
email ID mg@mail.com
Customer No 2
Customer Name MG2
City Thane2
email ID mg2@mail.com
PS A:\MCA2511\WEB_LAB\node.js> []
```

C) Events to perform Calculator operations using arrow functions.

**eventhandlingcalculator.js:**

```
var e = require('events');
var evmt = new e.EventEmitter();

evmt.on("div", (no1,no2)=>
{
    console.log(` ${no1} / ${no2} = ${no1/no2}`);
});
evmt.on("add", (no1,no2)=>
{
    console.log(` ${no1} + ${no2} = ${no1+no2}`);
});
evmt.on("sub", (no1,no2)=>
{
    console.log(` ${no1} - ${no2} = ${no1-no2}`);
});
evmt.on("mod", (no1,no2)=>
{
    console.log(` ${no1} % ${no2} = ${no1%no2}`);
});
evmt.on("sqrt", (no1)=>
{
    console.log(` Square root of ${no1} = ${Math.sqrt(no1)} `);
});
```

```
evmt.emit("add",10,20);
evmt.emit("div",10,2);
evmt.emit("sqrt",625);
evmt.emit("mod",10,20);
evmt.emit("sub",10,20);
```

**Output:**

```
PS A:\MCA2511\WEB_LAB\node.js> node evenhandlingcalculator.js
10 + 20 = 30
10 / 2 = 5
Square root of 625 = 25
10 % 20 = 10
10 - 20 = -10
PS A:\MCA2511\WEB_LAB\node.js> []
```

D) Events to calculate salary using arrow functions.

**evenhandlingsalary.js:**

```
var e = require('events');
var evmt = new e.EventEmitter();
evmt.on("Calculate Salary", (basic) =>
{
    var hra = basic * 60/100;
    var da = basic;
    var pt = 200;
    var it = basic * 30 / 100;
    var gross = basic + hra + da + pt + it;
    var net = gross - (pt+it);

    console.log(`Basic Salary : ${basic}`);
    console.log(`Dearness Allowance : ${da}`);
    console.log(`HRA : ${hra}`);
    console.log(`Profession Tax : ${pt}`);
    console.log(`Income Tax : ${it}`);
    console.log(`Gross Salary : ${gross}`);
    console.log(`Net Salary : ${net}`);
});

evmt.emit("Calculate Salary", 50000);
```

**Output:**

```
PS A:\MCA2511\WEB_LAB\node.js> node eventhandlingsalary.js
Basic Salary : 50000
Dearness Allowance : 50000
HRA : 30000
Profession Tax : 200
Income Tax : 15000
Gross Salary : 145200
Net Salary : 130000
PS A:\MCA2511\WEB_LAB\node.js> █
```