

## Day-5

### demo1.ts

```
// Swapping variables without using 3rd variables
// 1 using 3rd variable
// 2 addition & subtraction
// 3 multiplication & division
// 4 Using xor operator
// 5 using derefernce of array

let a=10;
let b=20;

console.log(`-----Before Swapping-----
    a=${a}
    b=${b}
`);

[a,b]=[b,a];

console.log(`-----After Swapping-----
    a=${a}
    b=${b}
`);
```

### demo2.ts

```
//Functions that return multiple values (JS interview Question)

function operation(a:number,b:number){
    return ([a+b,a-b,a*b,a/b,((a+b)/((a+b)/(a-b)))]);
}

let [add,sub,mul,div,fun]=operation(30,15);
console.log(`
    Addition      = ${add}
    Substraction  = ${sub}
    Multiplication = ${mul}
    Divison       = ${div}
    Function      = ${fun}
`)
```

### demo3.ts

```
//Json Object
// java script object notation
// Key & value format

let obj={
    id:101,
```

```

    fname:'Ankush ',
    lname:'Kamble'
}

//For calling we have two operators

//1 dot operator
//2 square operator

//Dot Operator
//Here we have to call by using variable and just add .
// console.log(`
//     First Name :: ${obj.fname},
//     Last  Name :: ${obj.lname},
//     Id      :: ${obj.id}
// `)

//Square Operator
//Here we have to call by using variable and then square bracket
// console.log(`
//     First Name :: ${obj["fname"]},
//     Last  Name :: ${obj['lname']},
//     Id      :: ${obj['id']}
// `)

//Array of Object

// let arrobj=[
//     {
//         id:9,
//         fname:'Ankush ',
//         lname:'Kamble'
//     },
//     {
//         id:10,
//         fname:'Anshul ',
//         lname:'Kamble'
//     }
// ]
//for printing array of object
// console.log(`
//     First Name :: ${arrobj[1].fname},
//     Last  Name :: ${arrobj[1].lname},
//     Id      :: ${arrobj[1].id}
// `)

//Array of Object and we are passing array of Object in array of Object

```

```

let arrobj=[
  {
    id:9,
    fname:'Ankush ',
    lname:'Kamble',
    country:{
      cid:101,
      cname:"India"
    },
    month:['Jan','Nov','Mar'],
    result:[
      {
        sub: "Engineering Thermodynamics",
        marks: 80
      },
      {
        sub: "Strength of Materials",
        marks: 70
      },{
        sub: "Refrigeration and Air-Conditioning",
        marks: 85
      }
    ]
  },
  {
    id:10,
    fname:'Anshul ',
    lname:'Kamble',
    country:{
      cid:102,
      cname:"Australia"
    },
    month:['Dec','Jul','Feb'],
    result:[
      {
        sub: "English",
        marks: 69
      },
      {
        sub: "Hindi",
        marks: 71
      },{
        sub: "Maths",
        marks: 59
      }
    ]
  },
  {

```

```

        id:10,
        fname:'Aman',
        lname:'Ukhalkar',
        country:{
            cid:102,
            cname:"India"
        },
        month:['Mar','Aug','May'],
        result:[
            {
                sub: "Engineering Thermodynamics",
                marks: 95
            },
            {
                sub: "Strength of Materials",
                marks: 90
            },
            {
                sub: "Refrigeration and Air-Conditioning",
                marks: 99
            }
        ]
    }
}

for(let i=0;i<arrobj.length;i++)
{
    console.log(`
    First Name    :: ${arrobj[i].fname}
    Last Name     :: ${arrobj[i].lname}
    Id            :: ${arrobj[i].id}
    Country       :: ${arrobj[i].country.cname}
    Month         :: ${arrobj[i].month.join(" ")}
    -----Result-----
    `)

    for(let j=0;j<arrobj[i].result.length;j++)
    {
        console.log(`
            Subject :: ${arrobj[i].result[j].sub}
            Marks   :: ${arrobj[i].result[j].marks}
        `)
    }
}

```