

1. Write a typescript program which contains one function named as Maximum. That function accepts array of numbers and returns the largest number from array.

```
/**
 * Find maximum from given array
 * @param a_number
 */
function maximunFromArray(a_number:number[]):number{
    let max = a_number[0];
    for(let i=1; i<a_number.length;i++){
        if(max<a_number[i]){
            max = a_number[i];
        }
    }
    return max;
}

var a_num:number[] = [23, 89, 6, 29, 56, 45, 77, 32];

console.log("Maximun number from array is ", maximunFromArray(a_num));
```

2. Write a typescript program which contains one function named as Summation. That function accepts array of numbers and returns the summation of each number from array.

```
/**
 * Find sum of all elements from Array
 * @param a_number
 */
function add(a_number:number[]):number{
    let sum:number = 0;
    for(let i=0; i<a_number.length; i++){
        sum+=a_number[i];
    }
    return sum;
}

var a_num:number[] = [23, 6, 7, 4, 5, 7];

console.log("Sum of all array element is ", add(a_num));
```

3. Write a typescript program which contains one function named as Maximum. That function accepts array of numbers and returns the second largest number from array.

```
/**
 * Find second largest number from array
```

```

/**
 *
 * @param a_number
 */
function secondMaximunFromArray(a_number: number[]): number {
let max = a_number[0];
let secondMax: number = null;
if (max < a_number[1]) {
max = a_number[1];
secondMax = a_number[0];
}
else {
secondMax = a_number[1];
}

for (let i = 2; i < a_number.length; i++) {
if (max < a_number[i]) {
secondMax = max;
max = a_number[i];
}
else {
if(secondMax<a_number[i]){
secondMax=a_number[i];
}
}
}
return secondMax;
}

var a_num: number[] = [23, 89, 6, 29, 56, 45, 77, 32];

console.log("Second maximun number from array is ", secondMaximunFromArray(a_num));

```

4. Write a typescript program which contains one arrow function named as ChkArmstrong. That function accepts one numbers and check whether number is Armstrong number or not.

```

/**
 *
 * @param number
 */
function isArmstrong(number:number):boolean{
var dummy = number;
var sum:number=0;
while(dummy>0){
sum+=cube((dummy%10));
dummy=Math.floor(dummy/10);
}
if(sum==number){
return true;
}
}

```

```

else{
return false;
}
}
/**
 *
 * @param no
 */

function cube(no:number):number{
return no*no*no;
}

if(isArmstrong(153)){
console.log("Number is a Armstrong number");
}
else{
console.log("Number is not a Armstrong number");
}

```

5. Write a typescript program which contains one function named as ChkString. That function accept one string and check whether that string contains “Marvellous” word or not.

```

/**
 * Check whether substring is present in string
 * @param inputString
 */
function checkString(inputString:string):number{
return inputString.indexOf("Marvellous");
}

if(checkString("Pune Kothrud Marvellous Infosystems") != -1){
console.log("String contains Marvellous in it.");
}
else {
console.log("String doesnot contains Marvellous in it.")
}

```