

Assignment-1

(MERN Stack)

Ques 1. Write a program in JavaScript to compute Prime Number.

Sol.

```
function prime(num){  
  if(num == 0 || num == 1){  
    console.log("Neither prime nor composite!");  
  }  
  else if(num == 2){  
    console.log("Prime number!")  
  }  
  else{  
    var composite = false;  
    for (let i = 2; i<=num/2; i++){  
      if (num%i==0){  
        composite = true  
        break;  
      }  
    }  
    if (composite == true){  
      console.log("Composite number!");  
    }  
    else{  
      console.log("Prime number!");  
    }  
  }  
}
```

```
var num = parseInt(prompt("Enter the number: "));  
prime(num);
```

Output:

```
Enter the number: 47  
Prime number!
```

Ques 2. Write a program in JavaScript to compute ArmStrong Number.

Sol.

```
function armStrong(num, i){
    var num1 = num;
    var rem;
    var sum = 0;
    while (num!=0){
        rem = num%10;
        sum = sum + Math.pow(rem,i);
        num = Math.floor(num/10);
    }
    if (sum==num1){
        console.log("ArmStrong Number!")
    }
    else{
        console.log("NOT ArmStrong Number!")
    }
}

function order(num){
    var rem;
    var i = 0;
    while (num!=0){
        rem = num%10;
        num = Math.floor(num/10);
        i++;
    }
    return i;
}

var num = parseInt(prompt("Enter the number: "));
var power = order(num);
armStrong(num, power);
```

Output:

```
Enter the number: 54748
ArmStrong Number!
```

Ques 3. Write a program in JavaScript and make a function add() such that:

```
add() = 0
add(10) = 10
add(10, 20) = 30
add(10, "20") = 30
add(10, "ten") = 10
add(10, NaN) = 10
add(10, 20, 30, 40, 50) = 150
```

Sol.

```
function add(){
  var sum = 0;
  for(let i = 0; i<arguments.length; i++){
    sum = isNaN(parseInt(arguments[i]))?sum+0:sum+parseInt(arguments[i]);
  }
  console.log(sum);
}
```

```
add();
add(10);
add(10, 20);
add(10, "20");
add(10, "ten");
add(10, NaN);
add(10, 20, 30, 40, 50);
```

Output:

```
0
10
30
30
10
10
150
```