**JavaScript Notes and Assignment**

-> ES6/ES2015 is the most recent version of javascript/ECMAScript.

-> Transpilers can be used to compile ES6 code to ES5 using babel,traceur,closure.

**What’s new in ES6**

-> let and const declaration -> new data structures

-> destructuring assignment -> iterators

-> classes and inheritance -> generators

-> template strings -> promise & asynchronous data

-> string features -> arrow functions

-> math & number features

**Assignment**

1. **Map**

const listOfNumbers = [1, 2, 3, 4, 5];

function isEvenOrOdd (num) {

if(num%2==0) return true;

return false;

}

function mapImplementation(listOfNumbers,isEvenOrOdd){

const answer = [];

for(let i=0 ; i<listOfNumbers.length ; i++){

answer.push(isEvenOrOdd(listOfNumbers [i]));

}

console.log(answer);

}

mapImplementation(listOfNumbers ,isEvenOrOdd);

1. **Filter**

const listOfNumbers = [1, 2, 3, 4, 5];

function isEven (num) {

if(num%2==0) return num;

}

function filterImplementation(listOfNumbers,isEven ){

const answer = [];

for(let i=0 ; i<listOfNumbers.length ; i++){

if(isEven (listOfNumbers [i]))

answer.push(listOfNumbers[i]);

}

console.log(answer);

}

filterImplementation(listOfNumbers ,isEven );

1. **Reduce**

const listOfNumbers = [1, 2, 3, 4, 5];

function SumOfEven(num) {

if(num%2==0) return num;

}

function reduceImplementation(listOfNumbers,SumOfEven ){

let answer =0;

for(let i=0 ; i<listOfNumbers.length ; i++){

if(SumOfEven (listOfNumbers [i]))

answer+=listOfNumbers[i];

}

console.log(answer);

}

reduceImplementation(listOfNumbers ,SumOfEven );

1. **ForEach**

const listOfNumbers = [1, 2, 3, 4, 5];

function eachElement(num) {

return num;

}

function forEachImplementation(listOfNumbers,eachElement){

for(let i=0 ; i<listOfNumbers.length ; i++){

if(eachElement (listOfNumbers [i]))

console.log(listOfNumbers[i]);

}

}

forEachImplementation(listOfNumbers ,eachElement );