ES6 & TypeScript Assignments

1. **Promises:** Create 2 promises, one generates value of x & another generates value of you. Write a program to print sum of x & y. (Use Promise.all)

import { promises } from "fs"

 function showX(x){

    return new Promise((resolve)=>{

        resolve("the value of x is: "+x)

    })

}

 function showY(y){

    return new Promise((resolve)=>{

        resolve("the value of y is: "+y)

    })

}

var showSum = function sum(x,y){

    return new Promise((resolve,reject)=>{

        const add1 =  parseInt(x);

        const add2 = parseInt(y);

        resolve('The sum is : '+add1+add2);

    })

}

function doWork(){

    const numberInX = parseInt(4);

    const numberInY= parseInt(4);

   Promise.all(

   [

     showX(numberInX),

     showY(numberInY),

      showSum(numberInX,numberInY)

   ]).then((message)=>{

       console.log(message)

   })

}

doWork()

1. **TypeScript classes & types:** Write a class Account with attributes id, name, balance. Add two sub classes SavingAccount & CurrentAccount having specific attribute interest & cash\_credit respectively. Create multiple saving & current account objects. Write a functionality to find out total balance in the bank.

class Account{

    balance: any;

    constructor(id,name,balance){

        id= this.id;

        name = this.name;

        balance  = this.balance;

    }

    }

    class SavingAccount extends Account {

        interest: any;

        cash\_credit: any;

        constructor(id,name,balance,interest,cash\_credit){

              super(id,name,balance);

              interest = this.interest;

              cash\_credit = this.cash\_credit;

        }

          showName(){

              let n = this.name;

            console.log(n);

        }

        showBalance = ()=>{let b = this.interest\*this.cash\_credit

        console.log('the balance in your account is: '+b);}

    }

    class CurrentAccount extends Account {

        interest: any;

        cash\_credit: any;

        constructor(id,name,balance,interest,cash\_credit){

              super(id,name,balance);

              interest = this.interest;

              cash\_credit = this.cash\_credit;

        }

        showBalance = ()=>{let b = this.interest\*this.cash\_credit

        console.log('the balance in your account is: '+b);}

    }

    var p = new SavingAccount(1,'Tom',10000,0.5,2000);

    p.showBalance();

    p.showName();

1. **TypeScript Interfaces:** Write an interface Printable. Create 2 objects circle & employee those implement Printable interface. Write a function printAll() that takes all objects as argument & invoke print() method on every object.

interface Printable{

    printAll(Object)

  }

  class Circle implements Printable{

      printAll(Object) {

          console.log('Priniting the Circle'+Object)

      }

  }

  class Employee implements Printable{

      printAll(Object){

         console.log('Employee: '+Object)

      }

  }

  let e  = new Employee()

  e.printAll('Tommy')

Output:

Employee: Tommy