*/\*ASSIGNMENT 1\*/*

*/\*Question1*

*const num2 = 10;*

*console.log(num2);*

*const obj1 = {*

*name: "Ann"*

*};*

*console.log(obj1.name);*

*\*/*

*/\*Question2*

*let x = 10;*

*if (x === 10) {*

*let x = 20;*

*console.log(x); // 20: reference x inside the block*

*}*

*console.log(x);*

*{*

*let log = function () {*

*console.log(foo);*

*};*

*let foo = 10;*

*log();*

*}*

*\*/*

*/\*Question3*

*let Order = {*

*id: 10,*

*title: "Rice",*

*price: 10000*

*};*

*function printOrder() {*

*console.log(Order.id);*

*console.log(Order.title);*

*}*

*function getPrice() {*

*console.log(Order.price);*

*}*

*printOrder();*

*getPrice();*

*\*/*

*/\*Question4*

*let names = ["Tom", "Ivan", "Jerry"];*

*let newnames = names.map((names, length) => [*

*{ name: "names", length: names.length }*

*]);*

*console.log(newnames);*

*\*/*

*/\*Question5*

*let Obj = {*

*add: function (num1 = 10, num2 = 20) {*

*return num1 + num2;*

*},*

*userFriends: function (username: string, ...userFriends: string[]) {*

*console.log(username);*

*console.log(userFriends);*

*},*

*printCapitalNames: function (...names: string[]) {*

*names.forEach((i) => console.log(i.toUpperCase()));*

*}*

*};*

*console.log(Obj.add(5, 6));*

*console.log(Obj.add());*

*let user = "Anne";*

*Obj.userFriends(user, "jane", "akash", "ankita", "geeta");*

*Obj.printCapitalNames("hello", "Prime", "Alexa", "Siri", "google");*

*\*/*

*/\*Question6*

*let laptopModel = "Lenovo ThinkPad 1818";*

*let myDeskNo = 7;*

*let myName = "Aneeta Ann John";*

*let ticket = `Respected sir, I am ${myName} and my Desk no is ${myDeskNo} and My System model is ${laptopModel}. I would like to raise a ticket.`;*

*console.log(ticket);*

*\*/*

*/\*Question7*

*let myArray = ["Flower", "Unicorn", "Rainbow", "Magic"];*

*let [first, second, third, fourth] = myArray;*

*console.log(third);*

*let organization = {*

*name1: "Ann",*

*address: {*

*houseNo: 7,*

*city: "Navi Mumbai",*

*zipcode: 1234567*

*}*

*};*

*let { name1, ...address } = organization;*

*console.log(JSON.stringify(address));*

*console.log(address.address.zipcode);*

*\*/*

*/\*Question8*

*class Account {*

*constructor(id, name, balance) {*

*this.id = id;*

*this.name = name;*

*this.balance = balance;*

*}*

*ToString() {*

*return `{id: ${this.id}, name: ${this.name}, balance:${this.balance}}`;*

*}*

*}*

*class SavingsAccount extends Account {*

*interest() {}*

*cash\_credits() {}*

*}*

*class CurrentAccount extends Account {*

*interest() {}*

*cash\_credits() {}*

*}*

*let sa = new SavingsAccount(1, "Rekha", 10000);*

*let ca = new CurrentAccount(1, "Rekha", 15000);*

*console.log(sa);*

*console.log(ca);*

*console.log(sa.ToString());*

*console.log(ca.ToString());*

*\*/*

*/\*ASSIGNMENT 2\*/*

*/\*Question1*

*class fibonacci {*

*n: number;*

*arr: number[];*

*constructor(n: number, arr = [0, 1]) {*

*this.n = n;*

*this.arr = arr;*

*let previousNo = 0;*

*let currentNo = 1;*

*let next = currentNo;*

*while (n > 2) {*

*next = currentNo + previousNo;*

*previousNo = currentNo;*

*currentNo = next;*

*arr.push(next);*

*n--;*

*}*

*var myIterator = this.arr[Symbol.iterator]();*

*}*

*next() {*

*//return this.arr.length >0 ? {value: this.arr.shift(), done:false} : {value: undefined, done:true};*

*//Used symbol here*

*var myIterator = this.arr[Symbol.iterator]();*

*let val;*

*while (!(val = myIterator.next()).done) {*

*console.log(val.value);*

*}*

*}*

*}*

*let ob1 = new fibonacci(5);*

*console.log(ob1.next());*

*\*/*

*/\*Question2*

*let iterable = [1,2,3,4,5,6]; //Our ideal Armstrong numbers*

*function createIterator(array:number[]){*

*let count = 0;*

*return{*

*getNextArmstrong: function(){*

*return count< array.length?*

*{value: array[count++], done:false}:*

*{value: undefined, done:true};*

*}*

*}*

*}*

*let myIterator = createIterator(iterable);*

*console.log(myIterator.getNextArmstrong());*

*\*/*

*/\*Question3*

*function\* generatorFunc(n1: number) {*

*/\*for(let i = n1; i<1000;i++){*

*let dig = i;*

*let sum =0;*

*while(dig>0){*

*let rem = dig%10;*

*sum += rem\*rem\*rem;*

*}*

*if(sum == dig){*

*console.log(dig);*

*yield 1;*

*}*

*}\*/*

*/\*let list = [153, 370, 371, 407]; //list of armstrong numbers*

*for (let item of list) {*

*yield item;*

*}*

*yield null;*

*}*

*var generatorObject = generatorFunc(128);*

*console.log(generatorObject.next().value);*

*console.log(generatorObject.next().value);*

*console.log(generatorObject.next().value);*

*console.log(generatorObject.next().value);*

*var generatorObject = generatorFunc(128); //resetting*

*console.log(generatorObject.next().value);*

*console.log(generatorObject.next().value);*

*\*/*

*/\*Question4*

*class ChatRoom{*

*roomNo:number;*

*user:Users[];*

*constructor(roomNo:number, ...user:Users[]){*

*this.roomNo = roomNo;*

*this.user = user;*

*}*

*getAllUsers(){*

*this.user.forEach(i=>console.log(i.name));*

*}*

*getAllMessages(){*

*this.user.forEach(i=>console.log(i.messages));*

*}*

*}*

*class Users{*

*name:string;*

*messages:string[];*

*constructor(name:string,...messages:string[]){*

*this.name = name;*

*this.messages = messages;*

*}*

*}*

*let user1 = new Users("geeta","yes friend","Hi","are you there!");*

*let user5 = new Users("noel","helllooo","no","wassup!");*

*let user2 = new Users("madhu","yes bro","Hi","are you there!");*

*let user3 = new Users("naruto","iidu","evado","kuda thelvad!");*

*let user4 = new Users("govindh","iiduu kuda","na","friende!");*

*let user6 = new Users("krrish","yes bro","Hi","are you there!");*

*let chatRoom1 = new ChatRoom(1,user1,user2,user3);*

*let chatRoom2 = new ChatRoom(1,user4,user5,user6);*

*let allUsers = new Set();*

*allUsers.add(user1);*

*allUsers.add(user2);*

*allUsers.add(user3);*

*allUsers.add(user4);*

*allUsers.add(user5);*

*allUsers.add(user6);*

*allUsers.add(user6); //ignored*

*//users and chat room mapping;*

*let userRoom = new Map();*

*userRoom.set(user1,chatRoom1);*

*userRoom.set(user2,chatRoom1);*

*userRoom.set(user3,chatRoom1);*

*userRoom.set(user4,chatRoom2);*

*userRoom.set(user5,chatRoom2);*

*userRoom.set(user6,chatRoom2);*

*console.log(allUsers);*

*console.log(userRoom);*

*console.log(userRoom.get(user4));*

*chatRoom1.getAllUsers();*

*chatRoom1.getAllMessages();*

*chatRoom2.getAllUsers();*

*\*/*

*/\*TypeScript ASSIGNMENT\*/*

*/\*Question1*

*const p1 = new Promise((resolve, reject) => {*

*let value = Math.floor(Math.random() \* 10 + 1);*

*resolve(value);*

*});*

*const p2 = new Promise((resolve, reject) => {*

*let value = Math.floor(Math.random() \* 10 + 1);*

*resolve(value);*

*});*

*Promise.all([p1, p2]).then((results) => {*

*const sum = results.reduce((a, b) => a + b);*

*console.log(sum);*

*});*

*\*/*

*/\*Question2*

*class Account{*

*constructor(id:number, name:string, balance:number){*

*this.id = id;*

*this.name = name;*

*this.balance = balance;*

*}*

*ToString(){*

*return `{id: ${this.id}, name: ${this.name}, balance:${this.balance}}`*

*}*

*}*

*class SavingsAccount extends Account{*

*interest(){*

*}*

*cash\_credits(){*

*}*

*}*

*class CurrentAccount extends Account{*

*interest(){*

*}*

*cash\_credits(){*

*}*

*}*

*let sa = new SavingsAccount(1,"Geeta",200000);*

*let ca = new CurrentAccount(1,"Geeta",16000);*

*console.log(sa);*

*console.log(ca);*

*console.log(sa.ToString());*

*console.log(ca.ToString());*

*\*/*

*/\*Question3*

*interface Printable {*

*objname: string;*

*print(): string;*

*}*

*let obj1: Printable = {*

*objname: "Obj1",*

*print: function () {*

*return `${this.objname}`;*

*}*

*};*

*let obj2: Printable = {*

*objname: "Obj2",*

*print: function () {*

*return `${this.objname}`;*

*}*

*};*

*const printAll = function (...objects: Object[]) {*

*objects.forEach((i) => console.log(i.print()));*

*};*

*printAll(obj1, obj2);*

*\*/*