C:\Users\SAI MADHURI KOLA\assignment.ts

// 1. Basic Types

let numberVar: number = 18;

let stringVar: string = "Hello Visakhapatnam";

let booleanVar: boolean = true;

let arrayOfNumbers: number[] = [90,91,92,93,94];

let tupleVar: [string, number] = ["Friday", 5];

enum DaysOfWeek {

  Sunday,

  Monday,

  Tuesday,

  Wednesday,

  Thursday,

  Friday,

  Saturday

}

// 2. Functions

function add(a: number, b: number): number {

  return a+b;

}

function capitalize(s: string): string {

  return s.charAt(0).toUpperCase() + s.slice(1);

}

// 3. Interfaces

interface Person {

  name: string;

  age: number;

  email: string;

}

let user: Person = {

  name: "Virat",

  age: 35,

  email: "Virat18@example.com"

};

// 4. Classes

class Car {

  make: string;

  model: string;

  year: number;

  constructor(make: string, model: string, year: number) {

    this.make = make;

    this.model = model;

    this.year = year;

  }

  displayInfo(): void {

    console.log(`Car Info: ${this.year} ${this.make} ${this.model}`);

  }

}

// 5. Generics

function reverseArray<T>(array: T[]): T[] {

  return array.reverse();

}

// for output

console.log(numberVar);

console.log(stringVar);

console.log(booleanVar);

console.log(arrayOfNumbers);

console.log(tupleVar);

console.log(DaysOfWeek.Saturday);

console.log(add(5, 3));

console.log(capitalize("assignment"));

console.log(user);

const myCar = new Car("Tata", "Model-1", 2024);

myCar.displayInfo();

console.log(reverseArray([2,4,6,8]));

console.log(reverseArray(["cm","pm","mlc", "mla", "mp"]));

Output:

C:\Users\SAI MADHURI KOLA>code assignment.ts

C:\Users\SAI MADHURI KOLA>tsc assignment.ts

C:\Users\SAI MADHURI KOLA>node assignment.js

18

Hello Visakhapatnam

true

[ 90, 91, 92, 93, 94 ]

[ 'Friday', 5 ]

6

8

Assignment

{ name: 'Virat', age: 35, email: 'Virat18@example.com' }

Car Info: 2024 Tata Model-1

[ 8, 6, 4, 2 ]

[ 'mp', 'mla', 'mlc', 'pm', 'cm' ]