Type Script Question:

1.

What are the primitive types in TypeScript?

**Number:** represents both integer and floating-point numbers

String: a sequence of characters:

**Boolean:** a logical value, either true or false.

**Null:** a null value.

**Undefined:** an undefined value

2.

Explain how the arrays work in TypeScript.

In TS, array are used to store a collection of values of the same type,

let myArray: number[] = [1, 2, 3, 4];

3.

What is any type, and when to use it?

Any type: telling TypeScript to turn off type checking for that value and to allow any operation to be performed on it.

in some cases where the type of a value is not known at compile-time

4.

What is void, and when to use the void type?

the **void** type is used to indicate that a function returns no value.

5.

What is an unknown type, and when to use it in TypeScript?

represents a value whose type is not known at compile-time. It is similar to the **any** type, but with stricter rules for type safety.

6.

What are the different keywords to declare variables in TypeScript?

**Let:** declares a variable that can be reassigned to a new value. The scope is limited to the block in which it is declared.

**Const:** declares a variable that cannot be reassigned to a new value.

**Var: The scope is either in** function or global scope,

7.

Provide the syntax of a function with the type annotations.

function addNumbers(num1: number, num2: number): number {

return num1 + num2;

}

8.

How to create objects in TypeScript?

Object Literals: let person = {

name: "John",

age: 30,

address: {

street: "123 Main St",

city: "Anytown",

state: "CA"

}

};

Constructor Functions: use constructor functions to create objects in TypeScript.

let john = new Person("John", 30);

new Classes

9.

How to specify optional properties in TypeScript?

use the question mark **?** after the property name.

10.

Explain the concept of null and its use in TypeScript.

**null** is a special type that represents the absence of any object value.

It is often used to indicate that a variable or property has no value or that a function did not return a value.

11.

What is undefined in TypeScript?

**undefined** is a type and value that represents the absence of any value

12.

Explain the purpose of the never type in TypeScript.

The **never** type is primarily used to indicate that a function will never return a value

13.

Explain how enums work in TypeScript?

, an enum is a way to define a set of named constants that represent a group of related values.

14.

Explain the TypeScript class syntax.

similar to the class syntax in other object-oriented programming languages such as Java and C#

class Car {

private make: string;

private model: string;

constructor(make: string, model: string) {

this.make = make;

this.model = model;

}

public drive(): void {

console.log(`Driving a ${this.make} ${this.model}`);

}

}

15.

Explain the arrow function syntax in TypeScript.

arrow functions provide a more concise syntax for defining functions compared to the traditional function syntax. Arrow functions are also referred to as lambda functions