Revised and write a program on slide # 28, 32, 34, 36, 37, 38 to 45

Revised slide #

**TypeScript also provides additional features and syntax that are not part of the standard JavaScript, such as classes**

Classes are a feature of TypeScript that allow you to define custom types with properties and methods. They are similar to the classes introduced in ES2015, but with some additional syntax and features. TypeScript classes support:

**Fields:** Properties that store data for each instance of the class. They can be declared with type annotations, initializers, and modifiers such as public, private, protected, and readonly.

**Constructors:** Special methods that are invoked when a new instance of the class is created. They can have parameters with type annotations and default values, and they can assign values to the fields using the this keyword.

**Methods:** Functions that perform actions or calculations on the data of the class. They can also have parameters with type annotations and return types, and they can access the fields using the this keyword.

**Inheritance:** The ability to extend another class and inherit its fields and methods. A class can extend only one other class using the extends keyword, but it can implement multiple interfaces using the implements keyword.

**Parameter properties:** A shorthand way to declare and initialize fields in the constructor using visibility modifiers on the parameters.

**Differentiate among var, let and const**

* var is global scope and also functional scope.
* let and const are block scope
* let and const are in 2015(ES06) specification.
* var can be hoisted but let and const can’t.
* var can be redeclared. But let and const can’t.
* Programmer prefer let over var, because let reduces the surface area for bugs.
* var declarations are globally scoped or function scoped while let and const are block scoped.
* var variables can be updated and re-declared within its scope; let variables can be updated but not re-declared; const variables can neither be updated nor re-declared.
* They are all hoisted to the top of their scope. But while var variables are initialized with undefined, let and const variables are not initialized.
* While var and let can be declared without being initialized, const must be initialized during declaration.