

Choose the correct answer:

1. TypeScript is a library which is backed primarily by:

Answer: (b) Microsoft

Explanation: It was **developed by Microsoft** and first released in **2012**.

2. TypeScript is used primarily with what backend language?

Answer: (c) Node

Explanation: **Node.js** is a runtime environment that allows you to execute JavaScript (and by extension, TypeScript) on the server side.

3. TypeScript compiles down to:

Answer: (c) JavaScript

Explanation: TypeScript is a statically typed superset of JavaScript

- The TypeScript compiler (tsc) checks for type errors and converts the **TypeScript code** into equivalent **JavaScript** code.

4. For inheritance TypeScript support:

Answer: (c) Extends

Explanation: In **TypeScript**, the **extends** keyword is used to implement **inheritance**, which is a fundamental concept in object-oriented programming.

5. Which one is incorrect method to declare a variable

- A. Let x = 999;
- B. Var x:string = "string";
- C. Let any var: any = [1,true,"name"];

Answer: **Let any var: any = [1, true, "name"];**

- This is **invalid** for two reasons:
- **Incorrect syntax order:** The any keyword before var is not valid.

6. Which one is correct method to declare a variable:

A. Var number x = 999;

B. Var x : number = 999;

C. Var number: x = 999;

Answer : (B) Var x : number = 999;

Explanation: In TypeScript, variables can be declared using the var, let, or const keywords, followed by the variable name, an optional type annotation, and an optional initialization value

7. TypeScript file has the extension:

Answer: (B) .ts

Explanation: In **TypeScript**, the standard file extension for source code files is **.ts**. These files contain TypeScript code, which is a statically typed superset of JavaScript.

TypeScript files are typically compiled into JavaScript files (.js) before they are executed in a JavaScript runtime environment, such as a web browser or Node.js.

8. Command for transpiling a .ts file is:

Answer: (A) tsc filename

Explanation: In TypeScript, the **tsc** command is used to invoke the TypeScript compiler, which transpiles TypeScript (.ts) files into JavaScript (.js) files.

9. Command for running transpiler in watch mode is

Answer: (B) tsc filename -w

Explanation: In TypeScript, the tsc command is used to invoke the TypeScript compiler. The -w flag, which stands for **watch mode**, instructs the compiler to monitor the specified file for changes and automatically recompile it whenever modifications are detected.

10. For calling the constructor of parent keyword used

Answer: (B) Super()

Explanation: In **TypeScript**, the `super()` keyword is used to call the constructor of the parent class from within the child class. This is essential in class inheritance to ensure that the parent class is properly initialized before the child class adds its own properties or methods.