

Pro Angular

Chapter 04: Primer, Part 2

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Q2. Consider the code block

```
function writeValue(val?: string) {  
  console.log(`Value: ${val ?? "Fallback value"}`);  
}
```

What is the type of the parameter val?

- A. string
- B. any
- C. string | undefined
- D. undefined

Answer: C

[Like c#, parameter is optional. When no argument passed to invoke, parameter val is undefined]

Q2. How do you define the rest parameter to a function?

- A. parameter name is prefixed with three periods (??)
- B. parameter name is prefixed with a what symbol (?)
- C. parameter name is prefixed with three periods (...)
- D. parameter name is prefixed with a hash symbol (#)

Answer: C

Q3. Which one is the rest operator?

- A. ??
- B. ?
- C. ...
- D. =>

Answer: C

Q4. Which one correctly defines a rest parameter function?

- A. val: string | undefined
- B. val?: string
- C. ..val:string[]
- D. val:string = "unknown"

Answer: C

Q5. Consider the variable

```
let f: ()=>string;
```

What value can be assigned to the valuable f?

- A.

```
function () {  
  return 101;  
}
```
- B.

```
function () {  
  return "C#";  
}
```
- C.

```
function (v:string){  
  return s.toUpperCase();  
}
```

```
D. function (v:string){  
    return s.length;  
}
```

Answer: B

[The f variable type is a function that accepts no parameter and returns string?]

Q6. Which variable type is a function that accepts a string and a number and returns a string?

- A. let f1: function (string, number):number;
- B. let f1: function (string, number){numbe}r;
- C. let f1: (string, number)=>number;
- D. let f1: (string, number):number;

Answer: C

Q7. What is the Spread Operator?

- A. it expands an array so that its contents can be used as function arguments or combined with other arrays.
- B. It combines an array items to a single string
- C. It concatenates two array into a third array
- D. All of the above

Answer: A

Q8. Which one is the rest operator?

- A. =>
- B. ??
- C. :
- D. ...

Answer: D

Q9. What is JavaScript or TypeScript module?

- A. Each folder that you add to a project is treated as a module
- B. Each TypeScript or JavaScript file that you add to a project is treated as a module
- C. Each class that is decorated with a @Module
- D. None

Answer: B

[Don't confuse it with angular module]

Q10. The classes, functions, and variables defined in a JavaScript or TypeScript file can be accessed

-
- A. only within that file by default
 - B. within that file by default and outside the file
 - C. only outside the file by default
 - D. None of the above

Answer: A

Q11. To make a class accessible from outside the file it is defined, what should you do?

- A. Mark the class with the export keyword
- B. Mark the class with the public keyword
- C. Mark the class with the module keyword
- D. None of the above

Answer: A

Q12. Which statement is used to declare a dependency on the features that a module provides?

- A. import
 - B. use
 - C. require
 - D. None of the above
-

Answer: A

Q12. Which angular package is known as reactive extension?

- A. Observable
- B. Promise
- C. RxJS
- D. None

Answer: C

Q13. Which one provides a simple system for sending and receiving notifications?

- A. Observable
- B. Promise
- C. RxJS
- D. None

Answer: C

Q14. What is Observable<T>?

- A. a promise object
- B. sequence of events that occur over a period of time.
- C. a trackable sequence of data
- D. None

Answer: B

Q15. Which is the basic method provided by an Observable?

- A. pipe
- B. subscribe
- C. map
- D. switch map

Answer: B

Q16. Which is not an Observable subscribe Argument Property?

- A. next
- B. error
- C. complete
- D. fail

Answer: D

Q17. Which code will **not** work?

- A.

```
function f() { /*...*/ }  
f();
```
- B.

```
f();  
function f() { /*...*/ }
```
- C.

```
let f= function () { /*...*/ }  
f();
```
- D.

```
f();  
let f= function () { /*...*/ }
```

Answer: D

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Ref. function hoisting at page 68]

Q18. How do you define rest parameters in function?

- A. First parameter of function prefixed with three periods, ...
- B. Last parameter of function prefixed with three periods, ...
- C. Any parameter of function prefixed with three periods, ...
- D. All of the above

Answer: B

Q19. Which function of the following uses rest parameters?

- A. function applicant(name, post, qualifications=''){/*..*/}
- B. function applicant(name, post, qualifications=[]){/*..*/}
- C. function applicant(name, post, qualifications=null){/*..*/}
- D. function applicant(name, post, ...qualifications){/*..*/}

Answer: D

Q20. What is an arrow function?

- A. a function contains a single statement
- B. a function that does not accept any parameter
- C. a function contains that does not return a value (void function)
- D. an alternative way of defining functions and are often used as arguments to other functions

Answer: D

Q21. Consider the code below

```
let p = (name, gender) => {  
  var m = 'Have a good day';  
  if(gender == 'M')  
  {  
    var m = 'Mr. ' + name;  
    console.log(m);  
  }  
  else  
  {  
    var m = 'Mrs. ' + name;  
    console.log(m);  
  }  
  console.log(m);  
}  
p('Alam', 'M');
```

What will be the output?

- A. Mr. Alam
Have a good day
- B. Have a good day
Have a good day
- C. Mr. Alam
Mr. Alam
- D. Code will not work

Answer: C

[var is scoped to function so even if it is declared in the inner block]

Q22. Consider the code below

```
let p = (name, gender) => {  
  Let m = 'Have a good day';  
  if(gender == 'M')  
  {  
    let m = 'Mr. ' + name;  
    console.log(m);  
  }  
  else  
  {
```

```

        Let m = 'Mrs. ' + name;
            console.log(m);
    }
    console.log(m);
}
p('Alam', 'M');

```

What will be the output?

- A. Mr. Alam
Have a good day
- B. Have a good day
Have a good day
- C. Mr. Alam
Mr. Alam
- D. Code will not work

Answer: A

[let is scoped to the block it is declared]

Q23 Which one uses templated strings correctly?

- A. var course = "ESAD"; var label = "Your Course " + course;
- B. var course = "ESAD"; var label = \$"Your Course {course}";
- C. var course = "ESAD"; var label = "Your Course \${course}";
- D. var course = "ESAD"; var label = `Your Course \${course}`;

Answer: D

Q24. You have an array variable

let colors= ['Red', 'Green', 'Blue']

Which one prints array items correctly using the forEach function?

- A. colors.forEach(x=> console.log(x));
- B. colors.forEach(x=> console.log(colors[x]));
- C. colors.forEach((x,i)=> console.log(x[i]));
- D. colors.forEach(x=> console.log(i));

Answer: A

[Syntax

array.forEach(function(value){...}

array.forEach(function(value, index){...})]

Q25. Which one is useful to expand an array so that its contents can be combined with other arrays?

- A. forEach function
- B. join function
- C. Spread operator
- D. Arrow function

Answer: C

Q26. You have an array variable

let colors= ['Red', 'Green', 'Blue']

You want to create another array with all the items in colors array and some extra items.

Which code does this correctly?

- A. let colors4 = colors.join("Yellow");
- B. let colors4 = colors.concat("Yellow");
- C. let colors4 = [colors, 'Yellow'];
- D. let colors4 = [...colors, 'Yellow'];

Answer: D

Q27. How do you define a constructor in a class in TypeScript?

- A. By defining a function with the name same as the class

-
- B. By defining a method named new
 - C. By defining a method named constructor
 - D. By defining a method named this

Answer: C

Q28. Which one correctly defines a readable/writable property fullName in a class?

- A. `fullName { get { /*..*/ } set { /*..*/ } }`
- B. `getFullName() { /*...*/ }`
`setFullName(value){ /*..*/ }`
- C. `get fullName { /*...*/ }`
`set fullName { /*...*/ }`
- D. `get fullName() { /*...*/ }`
`set fullName(value) { /*...*/ }`

Answer: D

[Syntax

Getter: `get propertyName() {return data; }`

Setter: `set propertyName(value) {data = value; }`

Q29. Which keyword is used in the class definition to indicate that the class is derived from another superclass?

- A. inherits
- B. extends
- C. derived
- D. A colon (:) character

Answer: B

Q30. _____are used to manage the dependencies in a web application?

- A. JavaScript modules
- B. JavaScript classes
- C. JavaScript functions
- D. JavaScript files

Answer: A

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Q31. You have defined a class Trainee in src/trainee.model.ts file

How do you make sure that class can be used outside of the file in which it is defined?

- A. Add the @Injectable decorator in the class
- B. Add the @Component decorator in the class
- C. Add the @Export decorator in the class
- D. Add the export keyword before the class definition

Answer: D

Q32. You have defined a class Trainee in src/trainee.model.ts file

What should you do to use the class in another TypeScript file?

- A. Add the class in the imports array in app.module.ts file for bootstrapping
- B. Add the import declaration in the file where you want to use the class
- C. Create a class and inject the trainee class in the constructor
- D. None of the above

Answer: B

[import { Trainee } from "../trainee.module"]

Q33. Which one is the correct typescript variable with type annotation?

- A. `number count;`
- B. `number:count`
- C. `count:number`
- D. `count as number`

Answer: C

Q34. Which typescript function declaration of the following does not properly annotate types that it accepts a string and return a number?

- A. `function wordCount(s){ return s.length;}`
- B. `function wordCount(s:string):number{ return s.length;}`
- C. `let wordCount:(s:string)=>number = function(s) { return s.length;}`
- D. `let wordCount:(s:string)=>number = (s) => s.length;`

Answer: A

Q35. In typescript, to declare multiple types for a variable, you use_____

- A. a comma (,) character to separate types
- B. a colon (:) character to separate types
- C. a bar (|) character to separate types
- D. an ampersand (&) character to separate types

Answer: C

[let m: number|boolean]

Q36. What is a union type in typescript?

- A. A variable for which type is unknown until runtime
- B. A variable for which type is determined from the assignment expression
- C. A variable which can contain multiple types of value
- D. A variable which can contain a set of distinct values

Answer: C

Q37. Which variable declaration is not valid?

- A. `X:any`
- B. `X:number, string`
- C. `X:number|bool`
- D. `X:string[]`

Answer: B

Q38. Which one is the type assertion syntax in typescript?

- A. `(type)variable`
- B. `<type>variable`
- C. `variable<type>`
- D. `variable instanceof type`

Answer: B

[<type>variable or variable as type]

Q39. Which code block is **not** valid?

- A. `let count:number = Number ("21")+1;`
- B. `let count:number = <number>("21")+1;`
- C. `let count:number =("21" as number)+1;`
- D. `let count:number = "21"+1;`

Answer: D

Q40. What is a tuple?

- A. fixed-length arrays, where each item in the array is of a specified type
- B. fixed-length arrays, where all the items in the array are of specified type
- C. key/value pair collection
- D. sorted collection

Answer: A

