

## TypeScript:

1.

```
Name: John Doe  
Age: 30
```

2.

```
Inside if block (var): 20  
Outside if block (var): 20  
Inside if block (let): 40  
Outside if block (let): 30  
Constant value: 50
```

3.

```
Number: 10  
Number after addition: 15  
String: Hello, TypeScript!  
String after concatenation: Hello, TypeScript! How are you?  
Boolean: true  
Boolean after toggle: false  
Is undefined: true
```

4.

```
Task4.ts:2:1 - error TS2322: Type 'string' is not assignable to type 'number'.
```

```
2 myNumber = "Hello, TypeScript!";  
   ~~~~~
```

```
Found 1 error in Task4.ts:2
```

5.

```
The type of the variable is: string
```

6.

```
the string is: This is a string  
The length of the string is: 16  
The converted number is: 123  
The another converted number is: 456  
The number as a string is: 789
```

7.

```
{  
  name: 'John Doe',  
  age: 30,  
  address: {  
    street: '123 Main St',  
    city: 'Anytown',  
    state: 'CA',  
    zipCode: '12345'  
  }  
}
```

8.

```
[ 1, 2, 3, 4, 5, 6 ]
```

```
[
```

```
  1, 1, 2, 3,
```

```
  4, 5, 6
```

```
]
```

```
[ 1, 1, 2, 3, 4, 5 ]
```

```
[ 1, 2, 3, 4, 5 ]
```

```
1
```

```
2
```

```
3
```

```
4
```

```
5
```

```
1
```

```
2
```

```
3
```

```
4
```

```
5
```

9.

```
Selected color is: Green
```

10.

```
null
```

```
undefined
```