

DATA TYPES

1) What will be the output?

```
let x=5;  
let y=x;  
x=10;  
console.log(x);  
console.log(y);
```

Output:

```
10  
5
```

2) What will be the output?

```
let obj1={name:"Alice"};  
let obj2=obj1;  
obj1.name="Bob";  
console.log(obj1.name);  
console.log(obj2.name);
```

Output:

```
Bob  
Bob
```

3) let a="hello";

```
let b=42;  
let c=true;  
let d={key:"value"};  
let e=null;  
let f=undefined;  
console.log(typeof a);  
console.log(typeof b);  
console.log(typeof c);  
console.log(typeof d);  
console.log(typeof e);
```

```
console.log(typeof f);
```

Output:

string

number

boolean

object

object

undefined

```
4) let numbers=[10, 20, 30, 40, 50];
```

```
console.log(numbers[2]);
```

```
console.log(numbers[0]);
```

```
console.log(numbers[numbers.length-1]);
```

Output:

30

10

50

```
5) let fruits=["apples", "banana", "mango"];
```

```
fruits[1]="orange";
```

```
console.log(fruits);
```

Output:

```
[ 'apples', 'orange', 'mango' ]
```

```
6) let matrix=[
```

```
  [1, 2, 3],
```

```
  [4, 5, 6],
```

```
  [7, 8, 9]
```

```
];
```

```
console.log(matrix[1][2]);
```

```
console.log(matrix[2][0]);
```

Output:

6

7

```
7) let person={  
    name:"john",  
    age:25,  
    city:"New York"
```

```
};
```

```
console.log(person.name)
```

```
console.log(person.age)
```

Output:

john

25

```
8) let car={  
    make:"toyota",  
    model:"corolla",  
    year:2021
```

```
};
```

```
console.log(car["make"]);
```

```
console.log(car["model"])
```

Output:

toyota

corolla

```
9) let book={  
    title:"The Great Gatsby",  
    author:"F. Scott Fitzgerald"
```

```
};
```

```
book.author="Anonymous";
```

```
console.log(book.author);
```

Output:

Anonymous

```
10) let student={  
    name:"Aline",  
    grade:"A"  
};  
student.age=20;  
console.log(student)
```

Output:

```
{ name: 'Aline', grade: 'A', age: 20 }
```