

Assignment - 8

Summary:

In today's JavaScript class, the instructor covered key concepts like data types, objects, arrays, and functions. The categorization of data types into primitive, trivial, and non-primitive types was explained, with real-life examples for clarity. The discussion on primitive data types included numbers, strings, and boolean, each demonstrated with specific examples. Other datatypes like null, undefined and non-primitive types like arrays and objects were introduced.

The instructor later started objects, comparing them to variables but highlighting their advantage of holding multiple values. The analogy of a car with properties like color, weight, and price explained objects as key-value pairs. The session also covered arrays as special variables and their index-based access. Finally, functions were explored, with a practical analogy involving a juicer, emphasizing their customization for specific actions and also, they were called when any event is triggered. Overall, the session covers fundamental JavaScript concepts.

Practice:

```
// Data Types
let studentName = "Thomas";
console.log(typeof studentName);

let studentAge = 22;
console.log(typeof studentAge);

let isGraduate = false;
console.log(typeof isGraduate);

let gpa;
console.log(typeof gpa);
```

> Console (beta) 4

"Running fiddle"

"string"

"number"

"boolean"

"undefined"

```
// Objects
let product = {
  name: "iPhone",
  price: 565.00,
  isUnlocked: true,
  rating: null
}
console.log(`Name of the product is: ${product.name}`);
console.log(`Any ratings: ${product.rating}`);
```

> Console (beta) 10

"undefined"

Running fiddle

"string"

"number"

"boolean"

"undefined"

"Name of the product is: iPhone"

"Any ratings: null"

```
JavaScript + No-Library (pure JS) Tidy
23
24 // Arrays
25 let fruits = ["Kiwi", "Pear", "PineApple", "Grapes"];
26 console.log(fruits[0]);
27 console.log(fruits[2]);
28
29 // Array of objects
30 let products = [
31   {
32     name: "iPhone",
33     price: 565.00,
34     isUnlocked: true,
35     rating: null
36   },
37   {
38     name: "Lenivo Ideapad",
39     price: 635.00,
40     SSD: "1TB",
41     hasGameCard: false
42   }
43 ]
44 console.log(`Memory of Laptop is: ${products[1].SSD}`);
45 console.log(`Price of iPhone is: ${products[0].price}`);
46
47 // Functions
48 function totalAmount(price, discount) {
49   return price - (price * discount/100);
50 }
51
52 console.log(`Total Amount = ${totalAmount(565.00, 7)}`);
```

> Console (beta) 21

"undefined"

"Name of the product is: iPhone"

"Any ratings: null"

"Kiwi"

"PineApple"

"Memory of Laptop is: 1TB"

"Price of iPhone is: 565"

"Total Amount = 525.45"