

Lesson 4 Demo 1

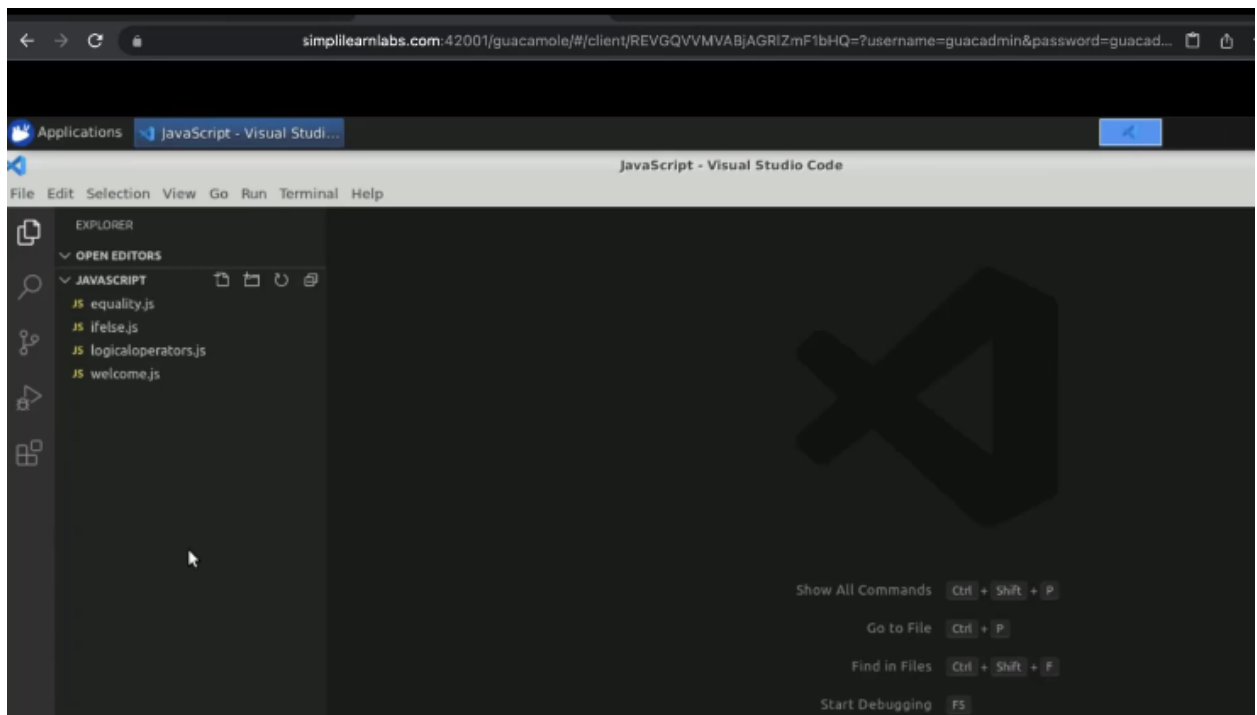
Creating Product User Object for eCommerce Store

Objective: To create a product user object for eCommerce store

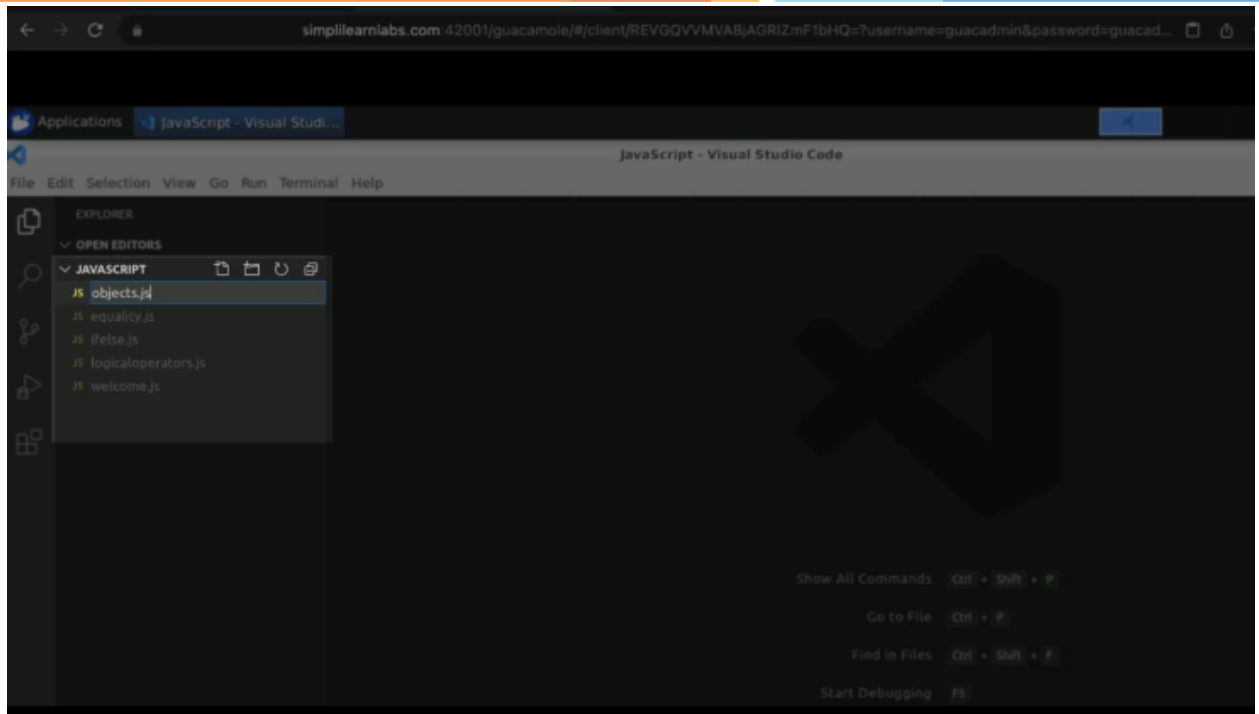
Prerequisites: None

Steps to perform:

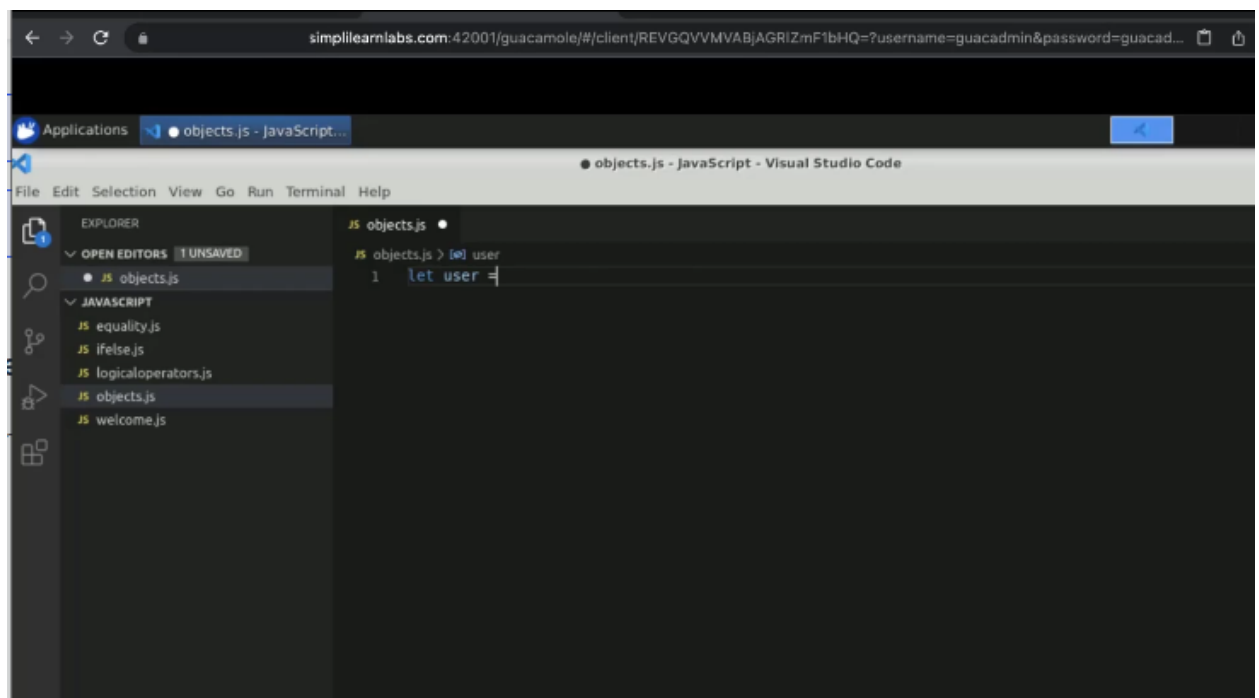
1. Open visual studio code.



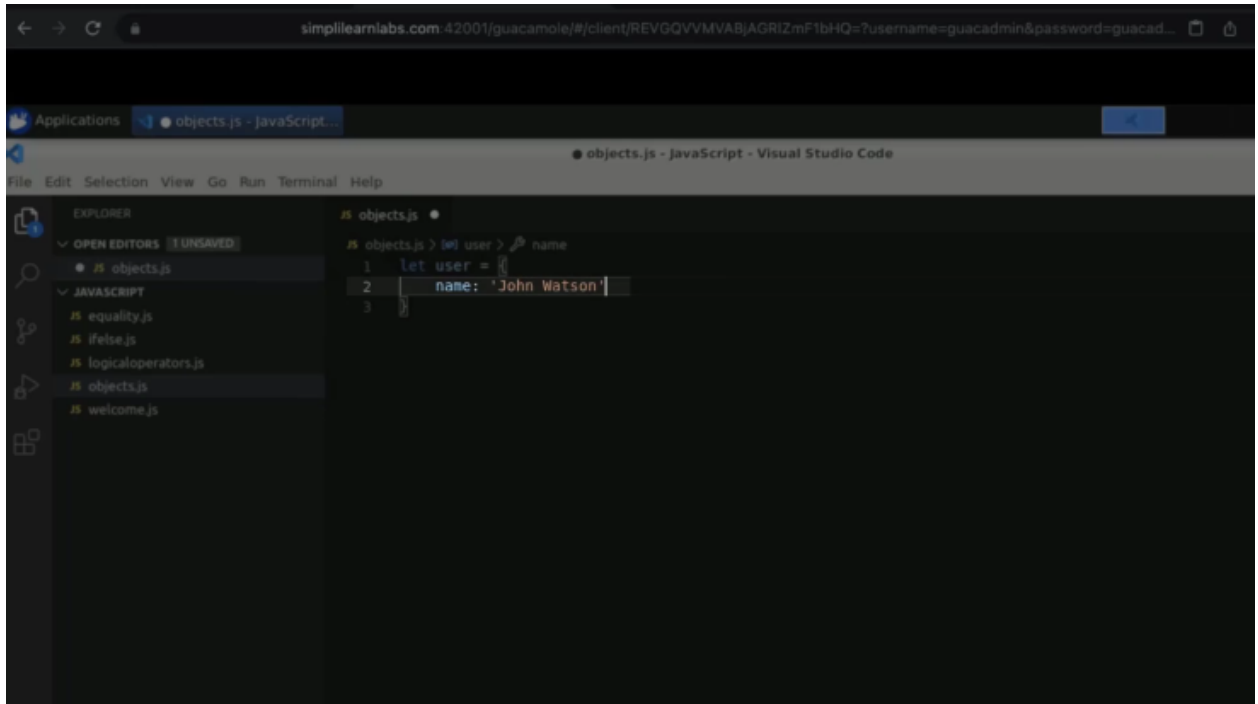
2. Create a new file named 'object.js'.



3. Create an object as 'user'.



4. Add key and value for an object.

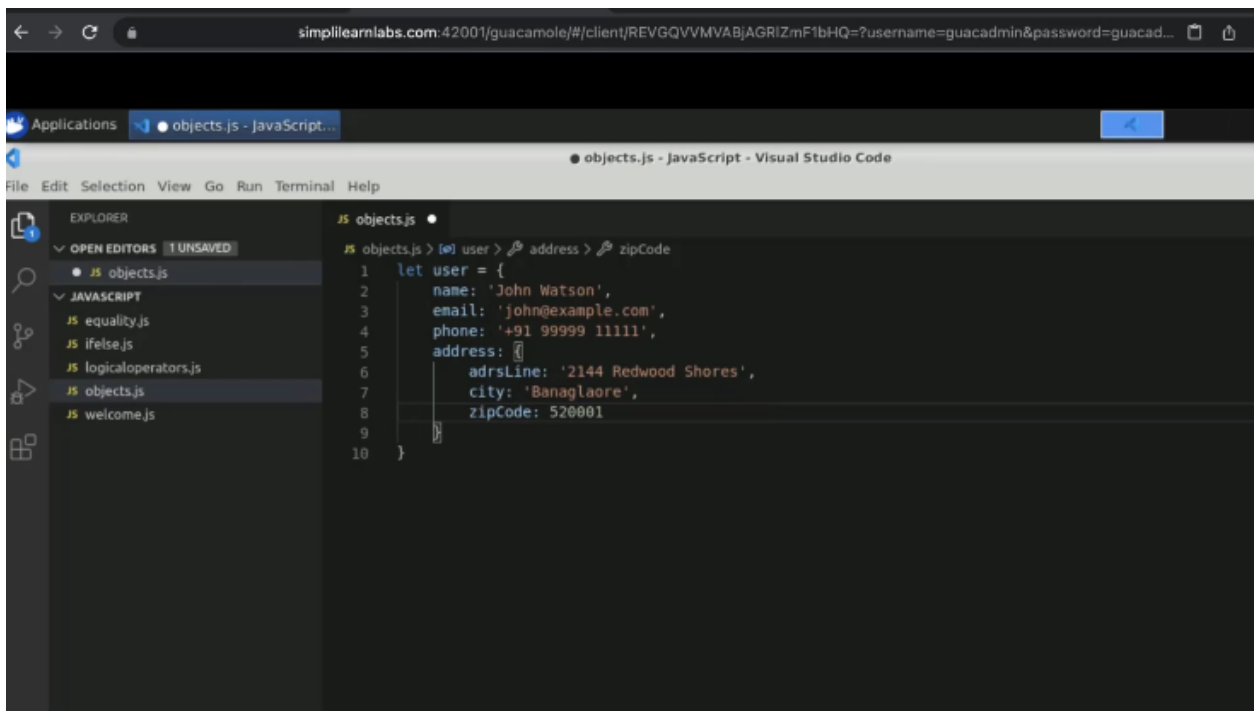


```

1 let user = {}
2   name: 'John Watson'
3

```

5. Pass e-mail, phone number, and address, where the address can be in a nested form.

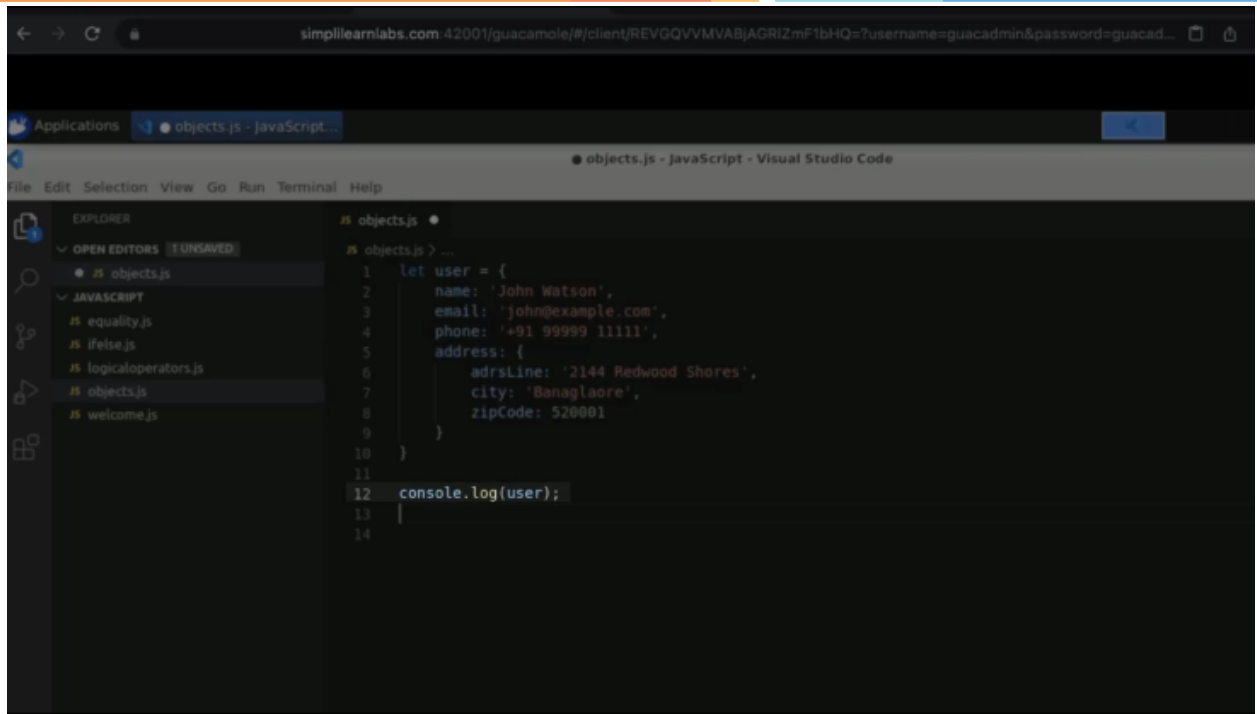


```

1 let user = {
2   name: 'John Watson',
3   email: 'john@example.com',
4   phone: '+91 99999 11111',
5   address: {
6     adrLine: '2144 Redwood Shores',
7     city: 'Banaglaore',
8     zipCode: 520001
9   }
10 }

```

6. Add a log statement for object 'user'.

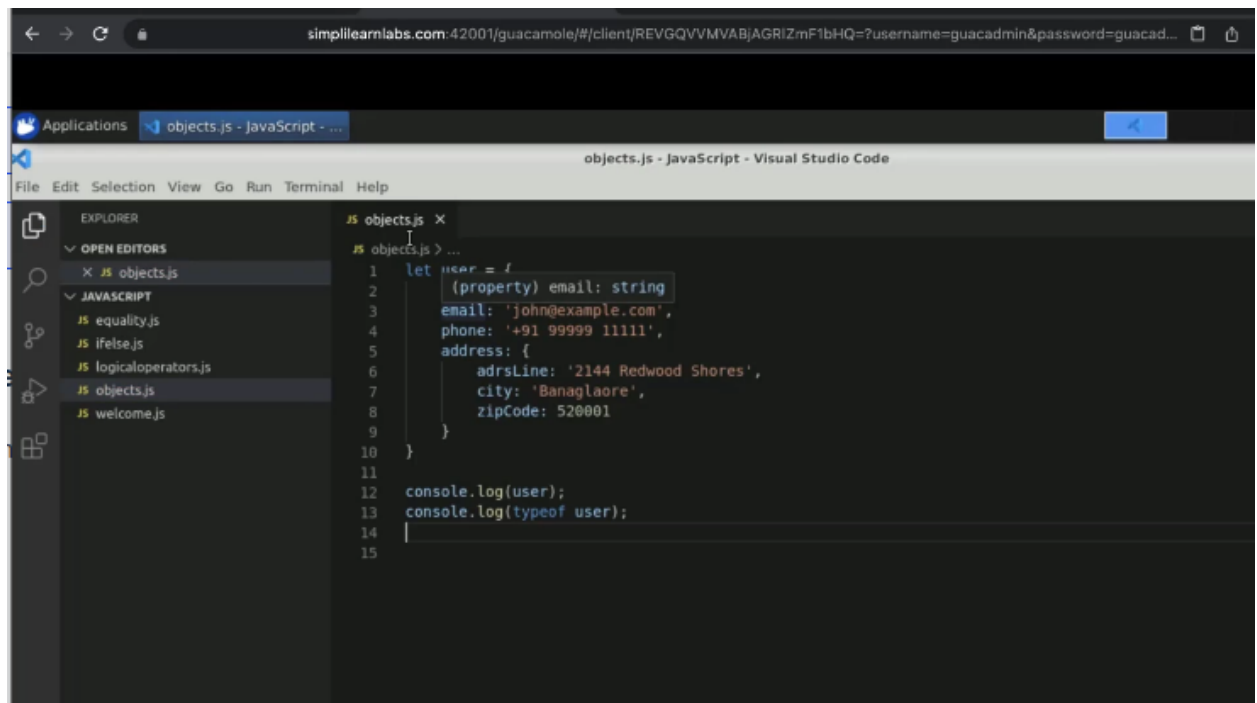


```

1  let user = {
2      name: 'John Watson',
3      email: 'john@example.com',
4      phone: '+91 99999 11111',
5      address: {
6          adrsLine: '2144 Redwood Shores',
7          city: 'Banaglaore',
8          zipCode: 520001
9      }
10 }
11
12 console.log(user);
13
14

```

7. Add one more log statement as 'type of user'.

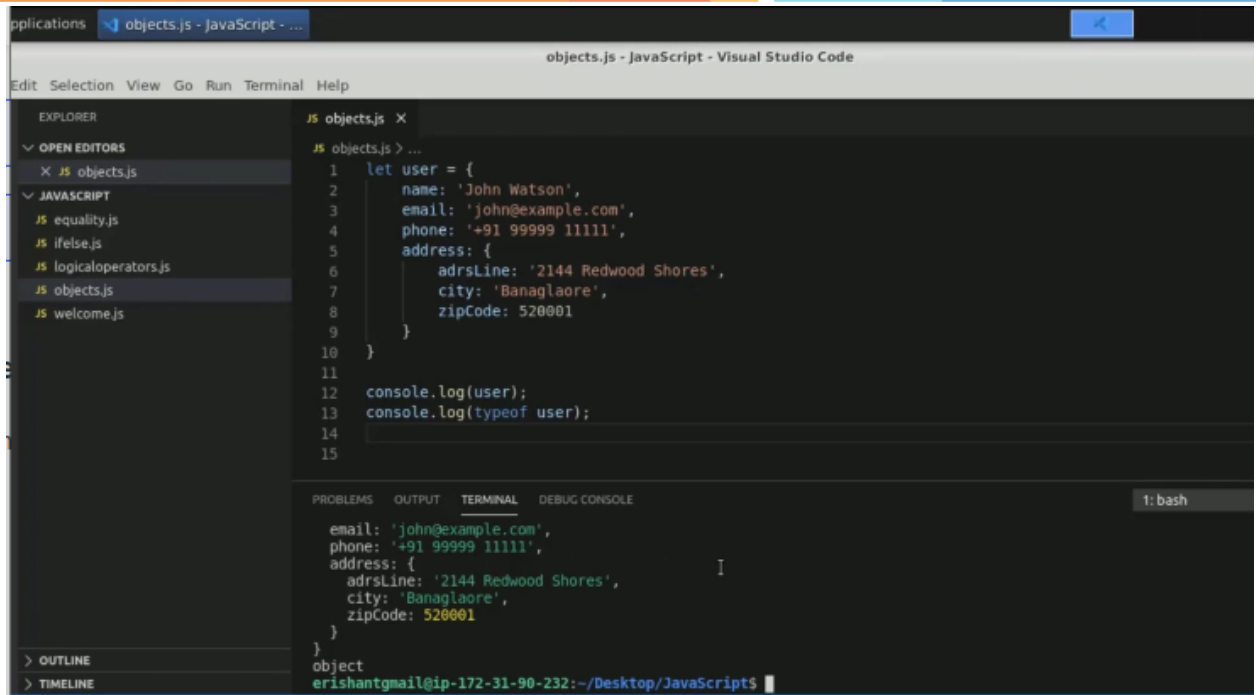


```

1  let user = {
2      (property) email: string
3      email: 'john@example.com',
4      phone: '+91 99999 11111',
5      address: {
6          adrsLine: '2144 Redwood Shores',
7          city: 'Banaglaore',
8          zipCode: 520001
9      }
10 }
11
12 console.log(user);
13 console.log(typeof user);
14
15

```

8. Execute the program in the terminal.



```

objects.js - JavaScript - Visual Studio Code
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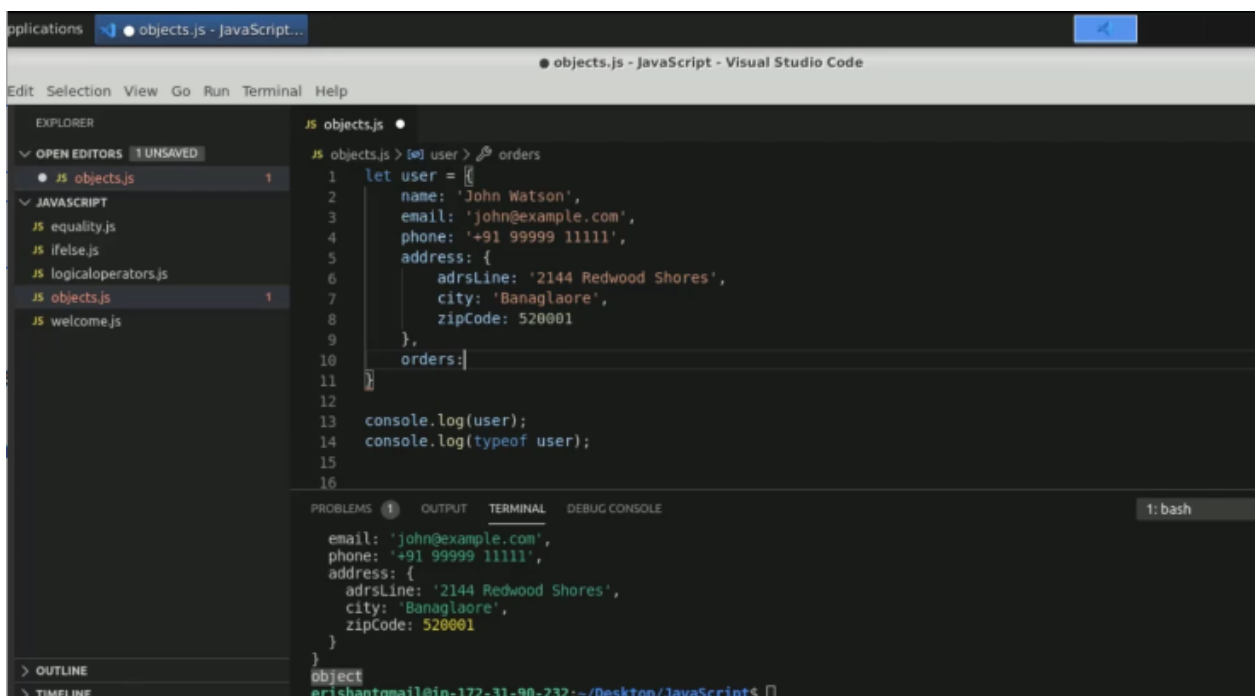
EXPLORER
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    JS objects.js
  JAVASCRIPT
    equality.js
    ifelse.js
    logicaloperators.js
    objects.js
    welcome.js

JS objects.js X
JS objects.js > ...
1  let user = {
2    name: 'John Watson',
3    email: 'john@example.com',
4    phone: '+91 99999 11111',
5    address: {
6      adrLine: '2144 Redwood Shores',
7      city: 'Banaglaore',
8      zipCode: 520001
9    }
10 }
11
12 console.log(user);
13 console.log(typeof user);
14
15

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE 1: bash
email: 'john@example.com',
phone: '+91 99999 11111',
address: {
  adrLine: '2144 Redwood Shores',
  city: 'Banaglaore',
  zipCode: 520001
}
}
object
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$

```

9. Create another key called 'orders'.



```

objects.js - JavaScript - Visual Studio Code
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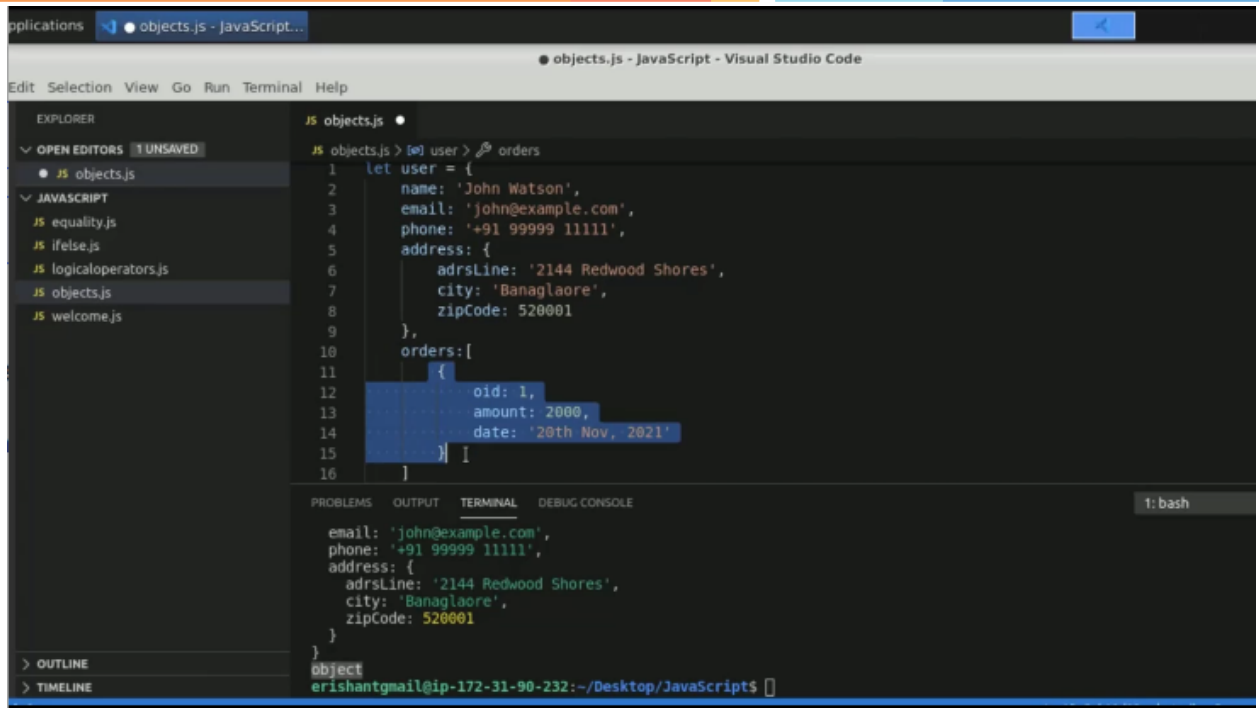
EXPLORER
  OPEN EDITORS 1 UNSAVED
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  JAVASCRIPT
    equality.js
    ifelse.js
    logicaloperators.js
    objects.js 1
    welcome.js

JS objects.js ●
JS objects.js > [50] user > orders
1  let user = {
2    name: 'John Watson',
3    email: 'john@example.com',
4    phone: '+91 99999 11111',
5    address: {
6      adrLine: '2144 Redwood Shores',
7      city: 'Banaglaore',
8      zipCode: 520001
9    },
10    orders:
11  }
12
13 console.log(user);
14 console.log(typeof user);
15
16

PROBLEMS 1 OUTPUT TERMINAL DEBUG CONSOLE 1: bash
email: 'john@example.com',
phone: '+91 99999 11111',
address: {
  adrLine: '2144 Redwood Shores',
  city: 'Banaglaore',
  zipCode: 520001
}
}
object
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$

```

10. Pass order id, amount and date in 'orders'.



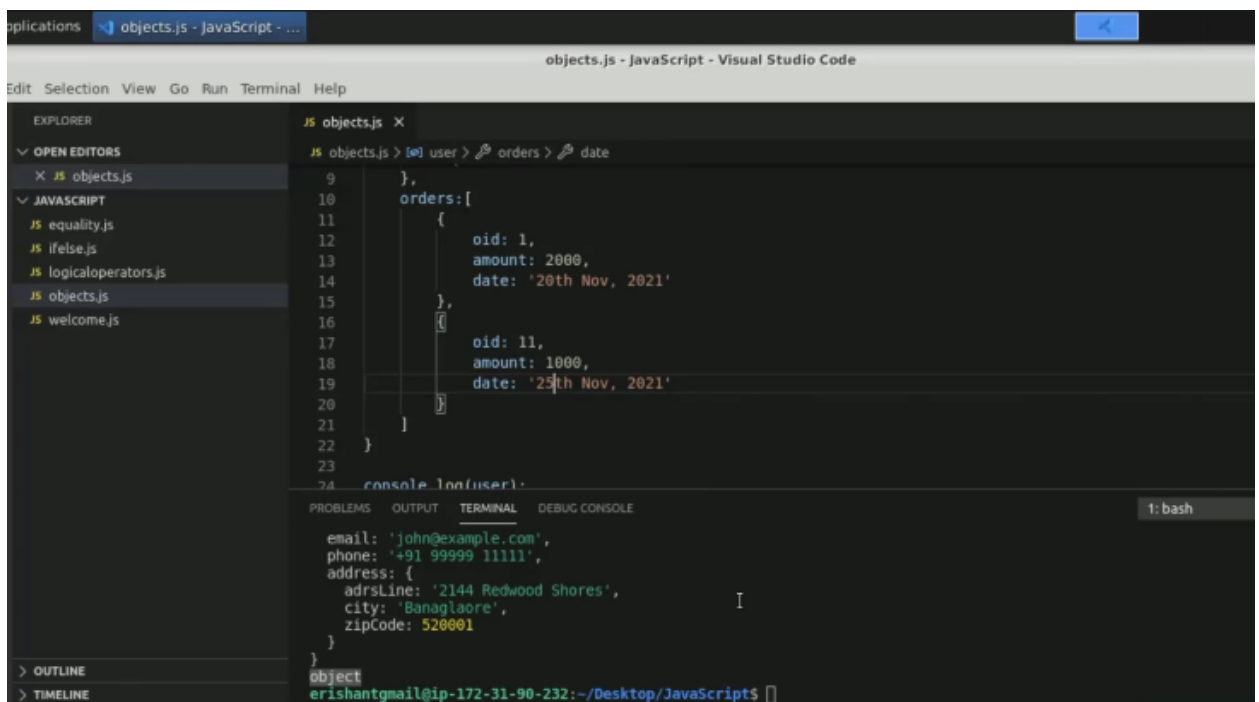
```

objects.js
JS objects.js
JS objects.js
JS equality.js
JS ifelse.js
JS logicaloperators.js
JS objects.js
JS welcome.js

JS objects.js
1 let user = {
2   name: 'John Watson',
3   email: 'john@example.com',
4   phone: '+91 99999 11111',
5   address: {
6     adrsLine: '2144 Redwood Shores',
7     city: 'Banaglaore',
8     zipCode: 520001
9   },
10  orders: [
11    {
12      oid: 1,
13      amount: 2000,
14      date: '20th Nov, 2021'
15    }
16  ]
17 }
18 console.log(user);
19
20 object
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$

```

11. Add another object under the 'orders'.



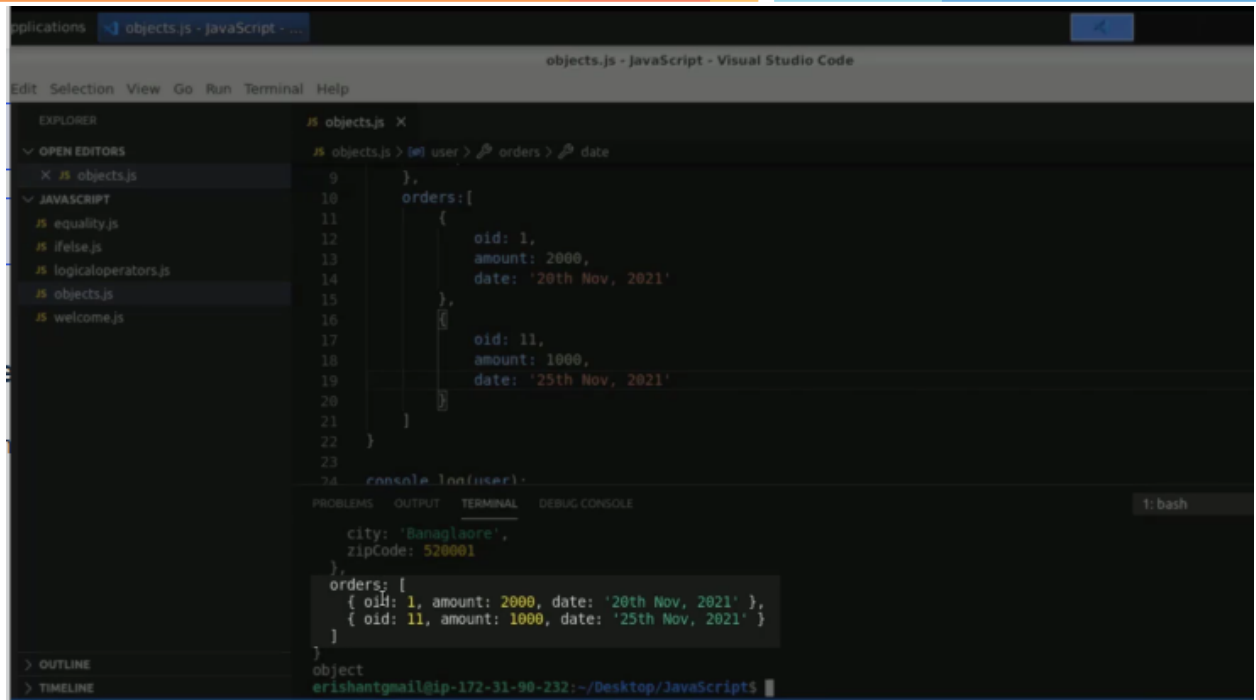
```

objects.js
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JS objects.js
JS equality.js
JS ifelse.js
JS logicaloperators.js
JS objects.js
JS welcome.js

JS objects.js
9 },
10 orders: [
11   {
12     oid: 1,
13     amount: 2000,
14     date: '20th Nov, 2021'
15   },
16   {
17     oid: 11,
18     amount: 1000,
19     date: '25th Nov, 2021'
20   }
21 ]
22 }
23 console.log(user);
24
25 object
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$

```

12. Re-run the program.



```

objects.js
9      },
10     orders: [
11       {
12         oid: 1,
13         amount: 2000,
14         date: '20th Nov, 2021'
15       },
16       {
17         oid: 11,
18         amount: 1000,
19         date: '25th Nov, 2021'
20       }
21     ]
22   }
23 }
24 console.log(user);

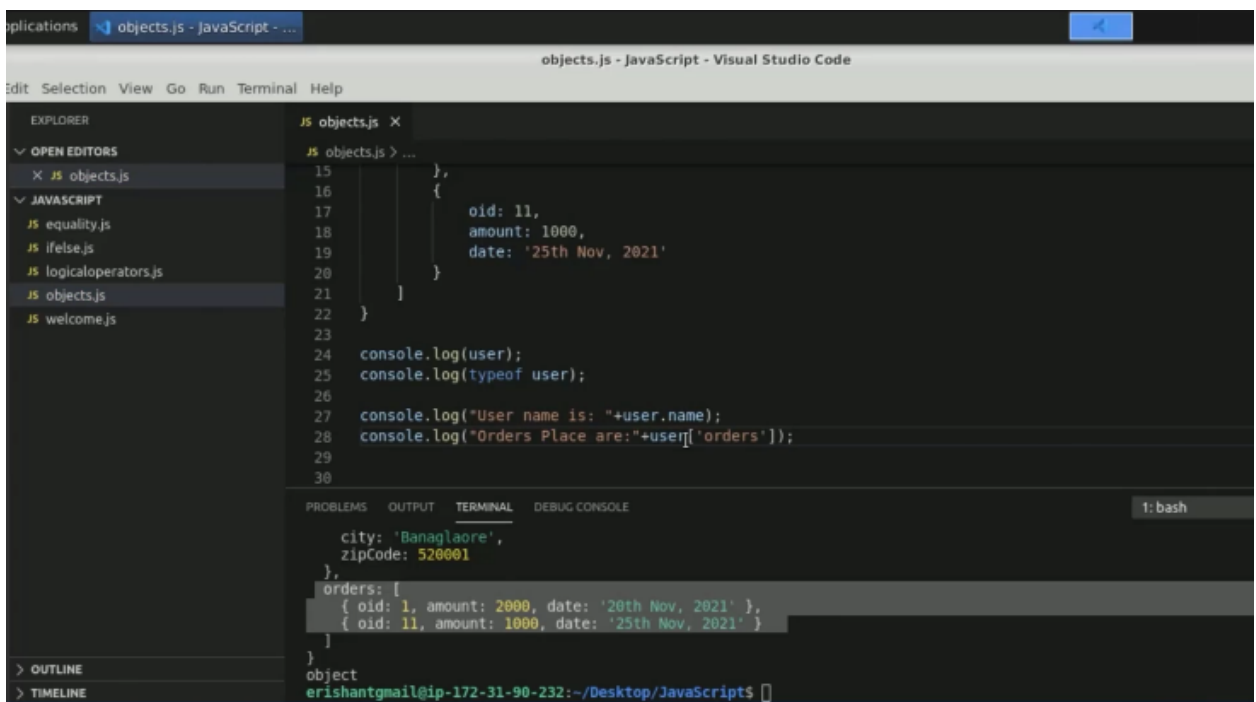
```

```

city: 'Banaglaore',
zipCode: 520001,
orders: [
  { oid: 1, amount: 2000, date: '20th Nov, 2021' },
  { oid: 11, amount: 1000, date: '25th Nov, 2021' }
]
}
object
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$

```

13. Add a log again and access the attributes of the key.



```

objects.js
15      },
16     {
17       oid: 11,
18       amount: 1000,
19       date: '25th Nov, 2021'
20     }
21   ]
22 }
23 }
24 console.log(user);
25 console.log(typeof user);
26
27 console.log("User name is: "+user.name);
28 console.log("Orders Place are: "+user['orders']);
29
30

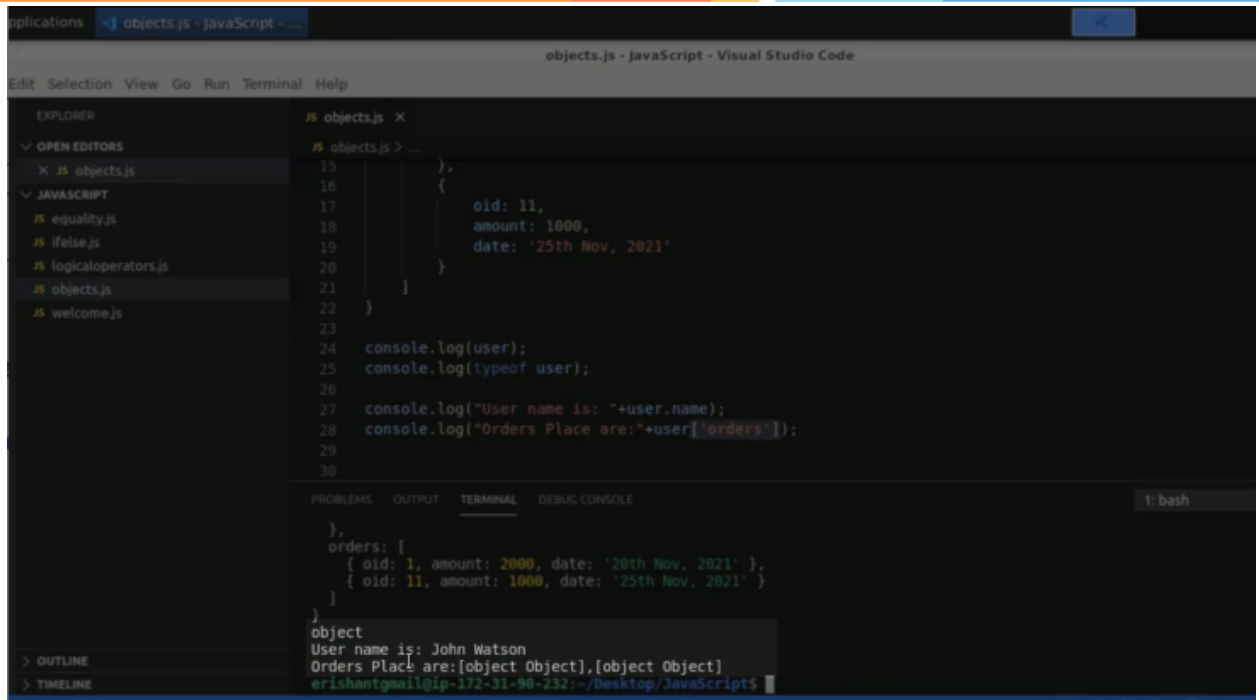
```

```

city: 'Banaglaore',
zipCode: 520001,
orders: [
  { oid: 1, amount: 2000, date: '20th Nov, 2021' },
  { oid: 11, amount: 1000, date: '25th Nov, 2021' }
]
}
object
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$

```

14. Execute the program.



```

objects.js - JavaScript - Visual Studio Code
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EXPLORER
  OPEN EDITORS
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  JAVASCRIPT
    equality.js
    ifelse.js
    logicaloperators.js
    objects.js
    welcome.js

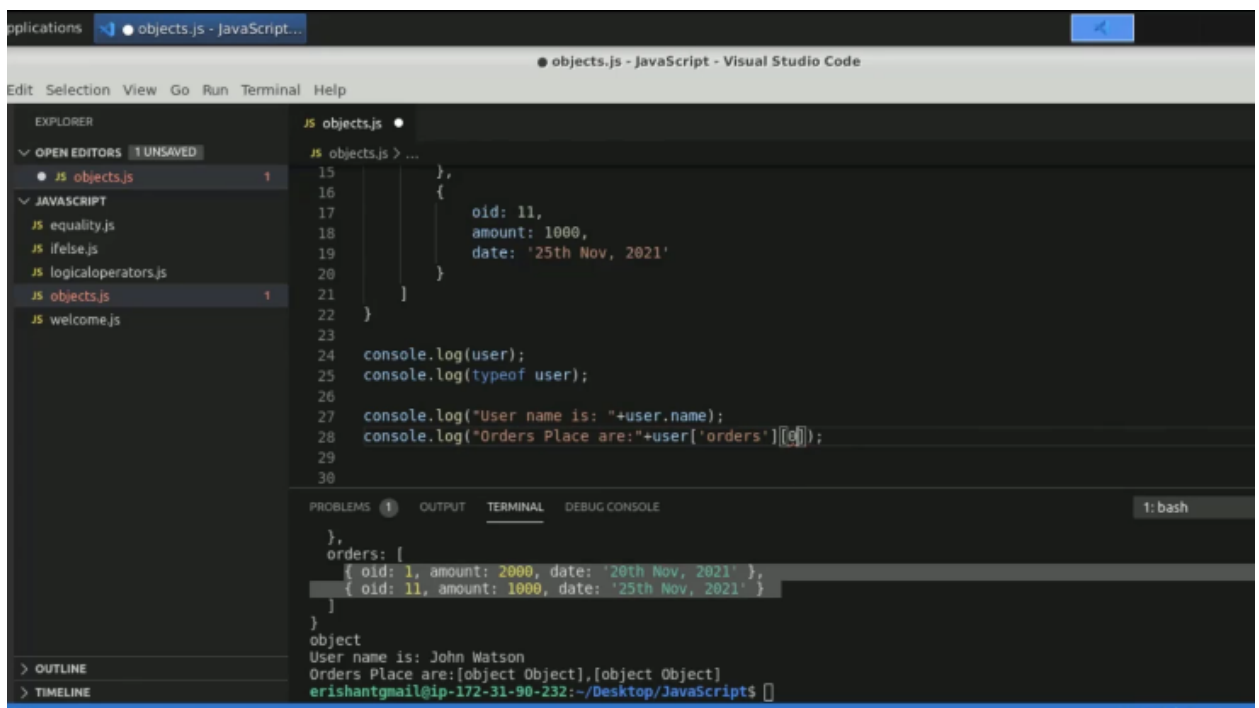
objects.js
15  },
16  {
17      old: 11,
18      amount: 1000,
19      date: '25th Nov, 2021'
20  }
21  ]
22  }
23
24  console.log(user);
25  console.log(typeof user);
26
27  console.log("User name is: "+user.name);
28  console.log("Orders Place are:"+user['orders']);
29
30

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
1: bash

},
orders: [
  { old: 1, amount: 2000, date: '20th Nov, 2021' },
  { old: 11, amount: 1000, date: '25th Nov, 2021' }
]
}
object
User name is: John Watson
Orders Place are:[object Object],[object Object]
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$

```

15. Use User of orders zero indexes.



```

objects.js - JavaScript - Visual Studio Code
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EXPLORER
  OPEN EDITORS 1 UNSAVED
    JS objects.js 1
  JAVASCRIPT
    equality.js
    ifelse.js
    logicaloperators.js
    objects.js 1
    welcome.js

objects.js
15  },
16  {
17      old: 11,
18      amount: 1000,
19      date: '25th Nov, 2021'
20  }
21  ]
22  }
23
24  console.log(user);
25  console.log(typeof user);
26
27  console.log("User name is: "+user.name);
28  console.log("Orders Place are:"+user['orders']([0]));
29
30

PROBLEMS 1 OUTPUT TERMINAL DEBUG CONSOLE
1: bash

},
orders: [
  { old: 1, amount: 2000, date: '20th Nov, 2021' },
  { old: 11, amount: 1000, date: '25th Nov, 2021' }
]
}
object
User name is: John Watson
Orders Place are:[object Object],[object Object]
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$

```


16. Save it and re-run the code.

```

objects.js
15 },
16 {
17     oid: 11,
18     amount: 1000,
19     date: '25th Nov, 2021'
20 }
21 ]
22 }
23
24 console.log(user);
25 console.log(typeof user);
26
27 console.log("User name is: "+user.name);
28 console.log("Orders Place are:"+user['orders'][0]);
29
30

```

```

},
orders: [
  { oid: 1, amount: 2000, date: '20th Nov, 2021' },
  { oid: 11, amount: 1000, date: '25th Nov, 2021' }
]
}
object
User name is: John Watson
Orders Place are:[object Object]
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$

```

17. Nest the statement one more time with the attribute as 'amount'.

```

objects.js
15 },
16 {
17     oid: 11,
18     amount: 1000,
19     date: '25th Nov, 2021'
20 }
21 ]
22 }
23
24 console.log(user);
25 console.log(typeof user);
26
27 console.log("User name is: "+user.name);
28 console.log("Orders Place are:"+user['orders'][0]['amount']);
29
30

```

```

},
orders: [
  { oid: 1, amount: 2000, date: '20th Nov, 2021' },
  { oid: 11, amount: 1000, date: '25th Nov, 2021' }
]
}
object
User name is: John Watson
Orders Place are:[object Object]
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$

```

18. Create an object called 'product'.

```

objects.js
objects.js - JavaScript - Visual Studio Code
File Selection View Go Run Terminal Help

EXPLORER
  OPEN EDITORS 1 UNSAVED
    JS objects.js
  JAVASCRIPT
    JS equality.js
    JS ifelse.js
    JS logicaloperators.js
    JS objects.js
    JS welcome.js

objects.js
18      amount: 1000,
19      date: '25th Nov, 2021'
20    }
21  ]
22 }
23
24 console.log(user);
25 console.log(typeof user);
26
27 console.log("User name is: "+user.name);
28 console.log("Orders Placed are:"+user['orders'][0]['amount']);
29
30 const product = {
31
32 }
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```

20. Add more attributes as 'inventory'. Pass objects within it such as; size, units, etc

The screenshot shows a Visual Studio Code editor with a file named `objects.js`. The code defines a `product` object with attributes `pid`, `name`, `brand`, `price`, and `inventory`. The `inventory` attribute is an array containing an object with `size` and `units` properties. The terminal output shows the console logs and the object structure.

```

JS objects.js
JS objects.js > [0] product > inventory
26
27 console.log("User name is: "+user.name);
28 console.log("Orders Placed are:"+user['orders'][0]['amount']);
29
30 const product = {
31   pid: 101,
32   name: 'Alphabounce',
33   brand: 'Adidas',
34   price: 5000,
35   inventory: [
36     {
37       size: 7,
38       units: 9
39     }
40   ]
41 }
42
43 },
44 orders: [
45   { oid: 1, amount: 2000, date: '20th Nov, 2021' },
46   { oid: 11, amount: 1000, date: '25th Nov, 2021' }
47 ]
48 }
49 object
50 User name is: John Watson
51 Orders Place are:2000

```

21. Manage inventory for more objects with different sizes and units.

The screenshot shows the same Visual Studio Code editor with the `objects.js` file. The `inventory` array now contains two objects, each with `size` and `units` properties. The terminal output shows the console logs and the object structure.

```

JS objects.js
JS objects.js > [0] product > inventory > units
29
30 const product = {
31   pid: 101,
32   name: 'Alphabounce',
33   brand: 'Adidas',
34   price: 5000,
35   inventory: [
36     {
37       size: 7,
38       units: 9
39     },
40     {
41       size: 8,
42       units: 3
43     }
44   ]
45 }
46
47 },
48 orders: [
49   { oid: 1, amount: 2000, date: '20th Nov, 2021' },
50   { oid: 11, amount: 1000, date: '25th Nov, 2021' }
51 ]
52 }
53 object
54 User name is: John Watson
55 Orders Place are:2000
56 erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$

```

22. Some more objects can be as follows:

Visual Studio Code interface showing a JavaScript file named `objects.js`. The file contains a JavaScript object with the following structure:

```

{
  brand: 'Adidas',
  price: 5000,
  inventory: [
    {
      size: 7,
      units: 9
    },
    {
      size: 8,
      units: 3
    },
    {
      size: 9,
      units: 0
    }
  ]
}

```

The last object in the `inventory` array, with `size: 9` and `units: 0`, is highlighted with a red box. The Explorer sidebar on the left shows the file structure, and the Terminal at the bottom shows the command prompt.

23. Log the product.

The screenshot shows the Visual Studio Code editor interface. The Explorer sidebar on the left displays the file structure, including 'objects.js' and 'welcome.js'. The main editor area shows the content of 'objects.js', which is a JavaScript object with nested properties. The object has a 'name' property, a 'product' property, and an 'orders' array. The 'product' property is an object with 'size' and 'units' properties. The 'orders' array contains two objects, each with 'oid', 'amount', and 'date' properties. A console log statement is present at the bottom of the file, logging the 'product' property.

```

39     },
40     {
41         size: 8,
42         units: 3
43     },
44     {
45         size: 9,
46         units: 0
47     }
48 ]
49
50
51 console.log(product);
52
53
54

```

The Terminal at the bottom shows the output of the code, which is the JSON representation of the 'product' object:

```

},
orders: [
  { oid: 1, amount: 2000, date: '20th Nov, 2021' },
  { oid: 11, amount: 1000, date: '25th Nov, 2021' }
]
}
object
User name is: John Watson
Orders Place are: 2000
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$

```

24. Save and run the code.

```

objects.js
39      },
40      {
41        size: 8,
42        units: 3
43      },
44      {
45        size: 9,
46        units: 0
47      }
48    ]
49  }
50
51  console.log(product[0]);
52
53
54

```

```

1: bash
Orders Placed are:2000
{
  pid: 101,
  name: 'Alphabounce',
  brand: 'Adidas',
  price: 5000,
  inventory: [
    { size: 7, units: 9 },
    { size: 8, units: 3 },
    { size: 9, units: 0 }
  ]
}

```

25. Write product inventory as a zeroth index and update the units with seven.

```

objects.js
39      },
40      {
41        size: 8,
42        units: 3
43      },
44      {
45        size: 9,
46        units: 0
47      }
48    ]
49  }
50
51  console.log(product);
52  product.inventory[0].units = 7
53
54

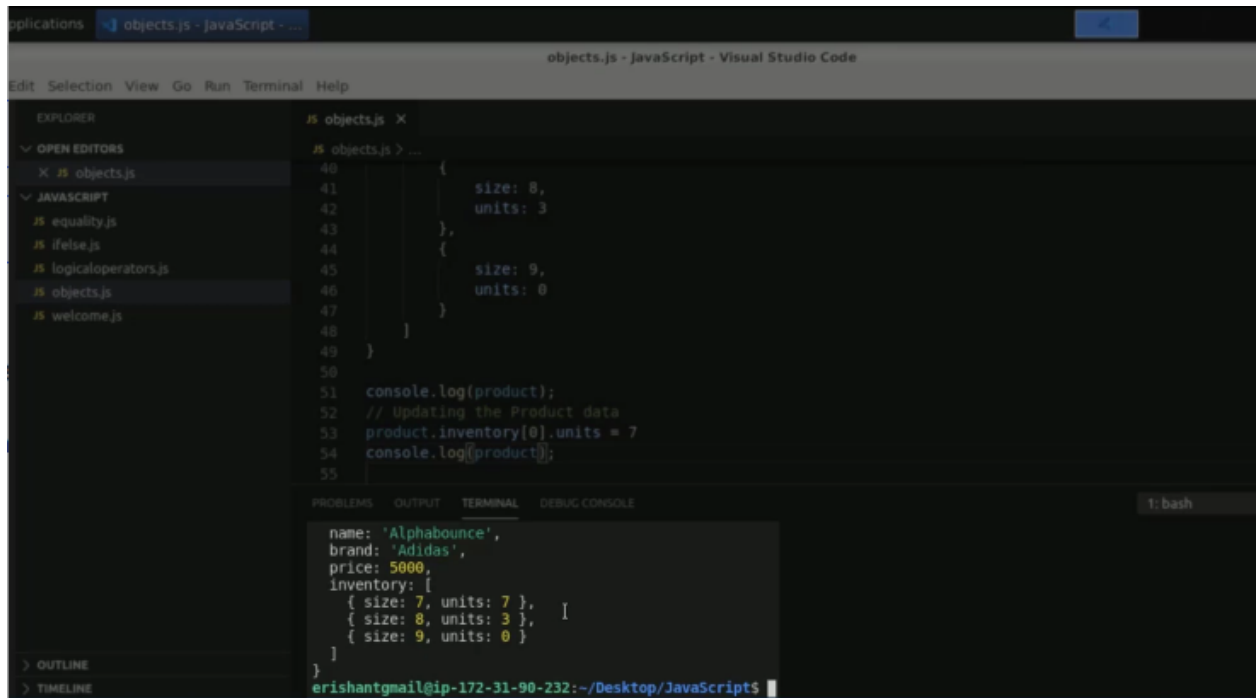
```

```

1: bash
Orders Placed are:2000
{
  pid: 101,
  name: 'Alphabounce',
  brand: 'Adidas',
  price: 5000,
  inventory: [
    { size: 7, units: 9 },
    { size: 8, units: 3 },
    { size: 9, units: 0 }
  ]
}

```

26. Run the program.



```

objects.js - JavaScript - Visual Studio Code
Edit Selection View Go Run Terminal Help

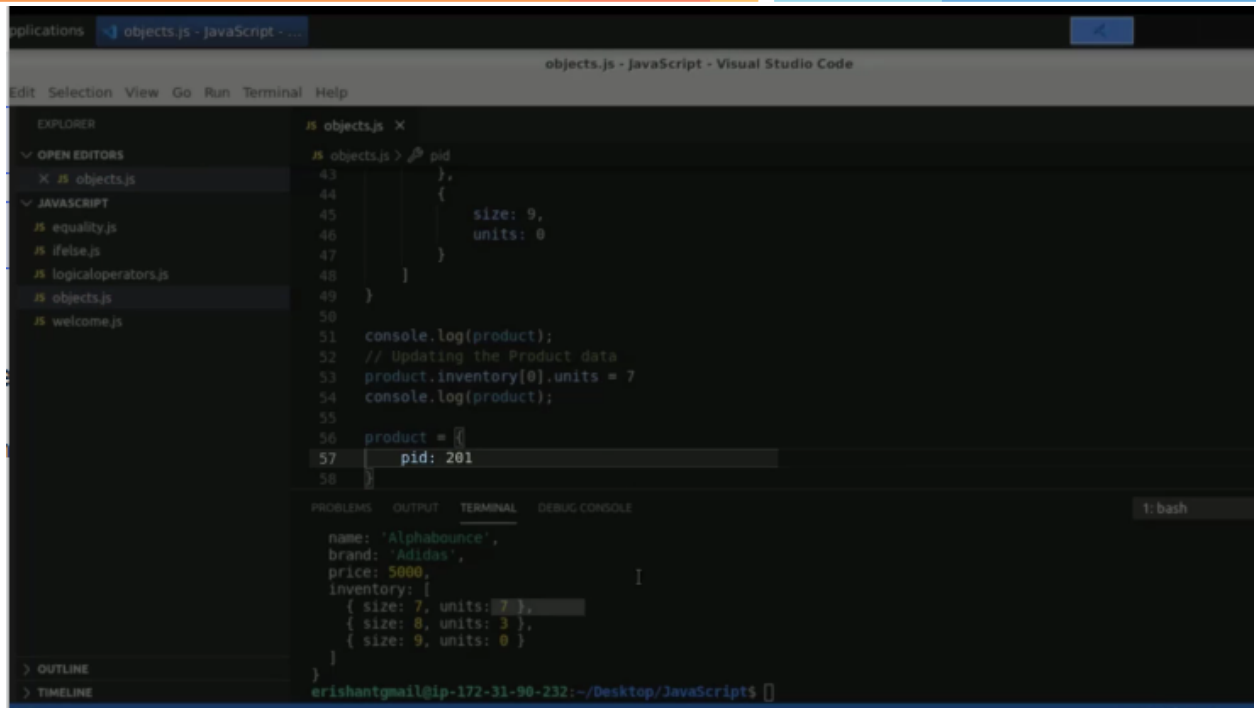
EXPLORER
  OPEN EDITORS
    X JS objects.js
  JAVASCRIPT
    JS equality.js
    JS ifelse.js
    JS logicaloperators.js
    JS objects.js
    JS welcome.js

JS objects.js X
JS objects.js > ...
40
41     {
42         size: 8,
43         units: 3
44     },
45     {
46         size: 9,
47         units: 0
48     }
49 ]
50
51 console.log(product);
52 // Updating the Product data
53 product.inventory[0].units = 7
54 console.log(product);
55

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
1: bash
name: 'Alphabounce',
brand: 'Adidas',
price: 5000,
inventory: [
  { size: 7, units: 7 },
  { size: 8, units: 3 },
  { size: 9, units: 0 }
]
}
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$

```

27. Put a product id as 201 in a new product object.



```

objects.js
43 },
44 {
45     size: 9,
46     units: 0
47 }
48 ]
49 }
50
51 console.log(product);
52 // Updating the Product data
53 product.inventory[0].units = 7
54 console.log(product);
55
56 product = {
57     pid: 201
58 }

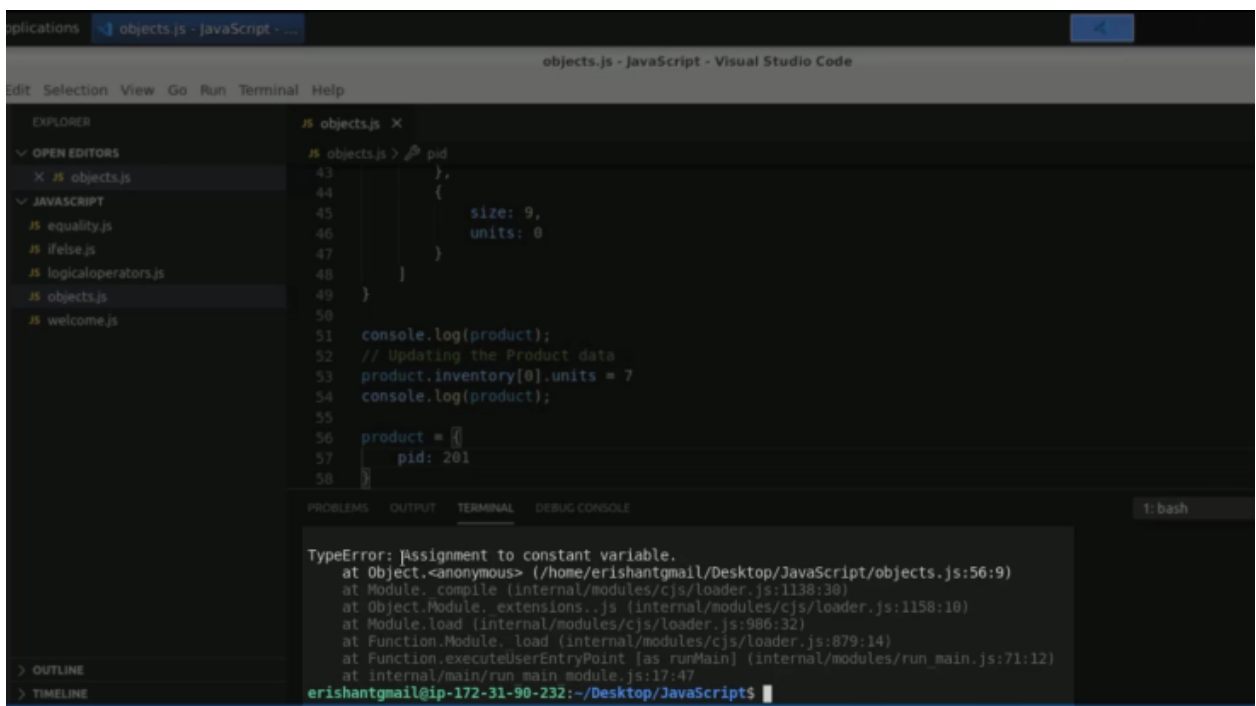
```

```

name: 'Alphabounce',
brand: 'Adidas',
price: 5000,
inventory: [
  { size: 7, units: 7 },
  { size: 8, units: 3 },
  { size: 9, units: 0 }
]
}
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$

```

28. Run the program.



```

objects.js
43 },
44 {
45     size: 9,
46     units: 0
47 }
48 ]
49 }
50
51 console.log(product);
52 // Updating the Product data
53 product.inventory[0].units = 7
54 console.log(product);
55
56 product = {
57     pid: 201
58 }

```

```

TypeError: Assignment to constant variable.
    at Object.<anonymous> (/home/erishantgmail/Desktop/JavaScript/objects.js:56:9)
    at Module.compile (internal/modules/cjs/loader.js:1138:30)
    at Object.Module._extensions..js (internal/modules/cjs/loader.js:1158:10)
    at Module.load (internal/modules/cjs/loader.js:986:32)
    at Function.Module._load (internal/modules/cjs/loader.js:879:14)
    at Function.executeUserEntryPoint [as runMain] (internal/modules/run_main.js:71:12)
    at internal/main/run_main_module.js:17:47
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$

```

