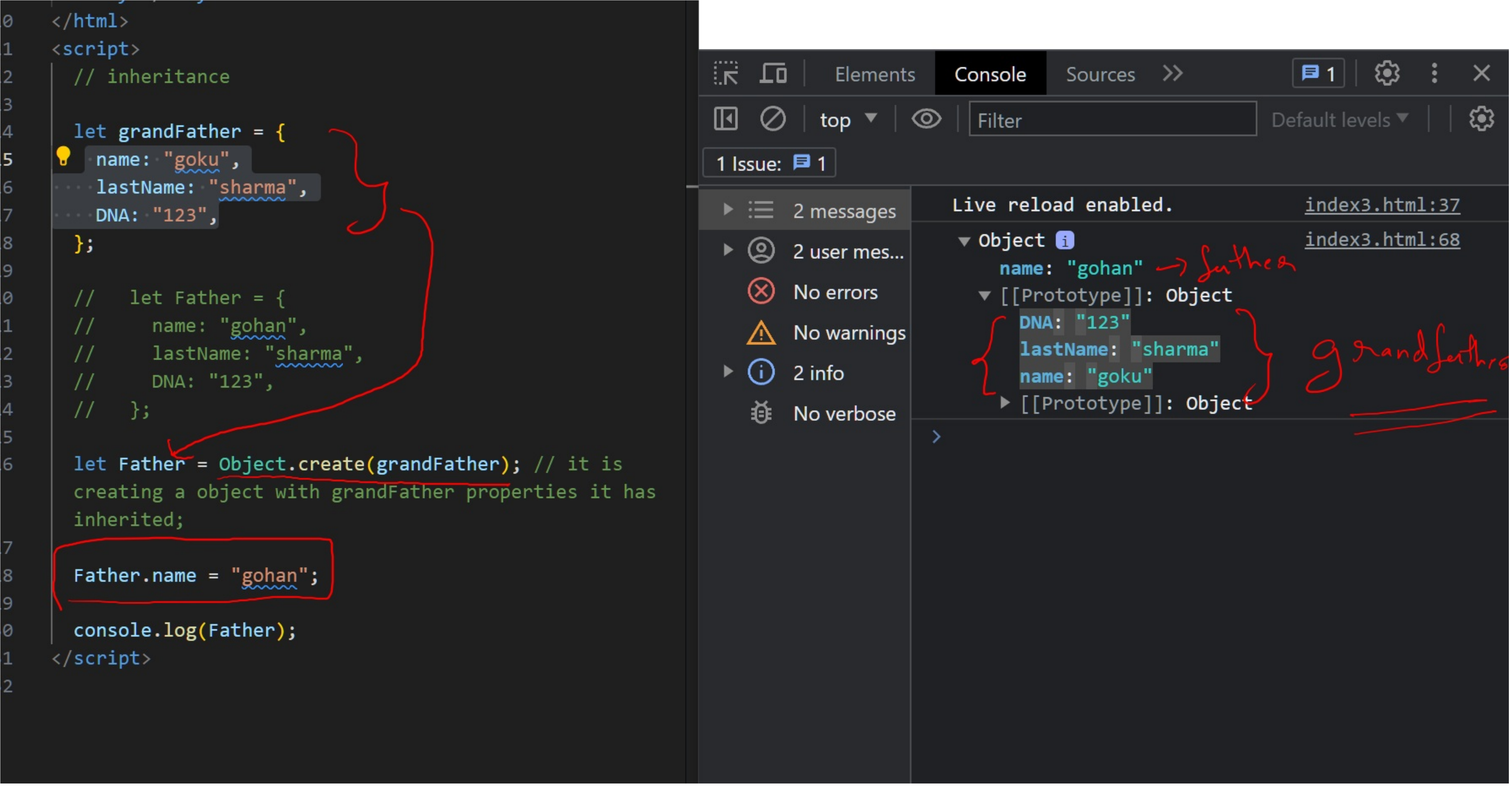
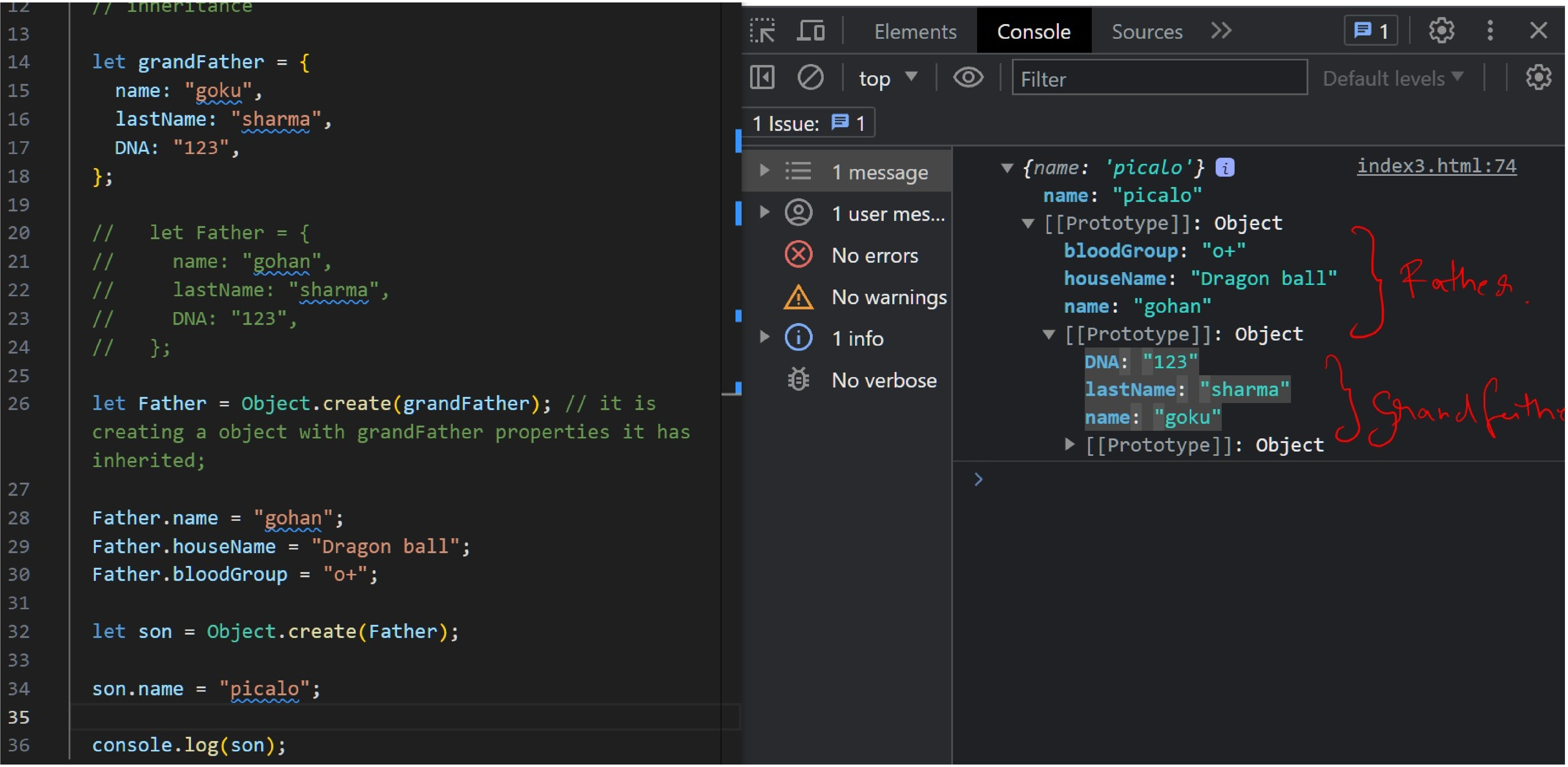


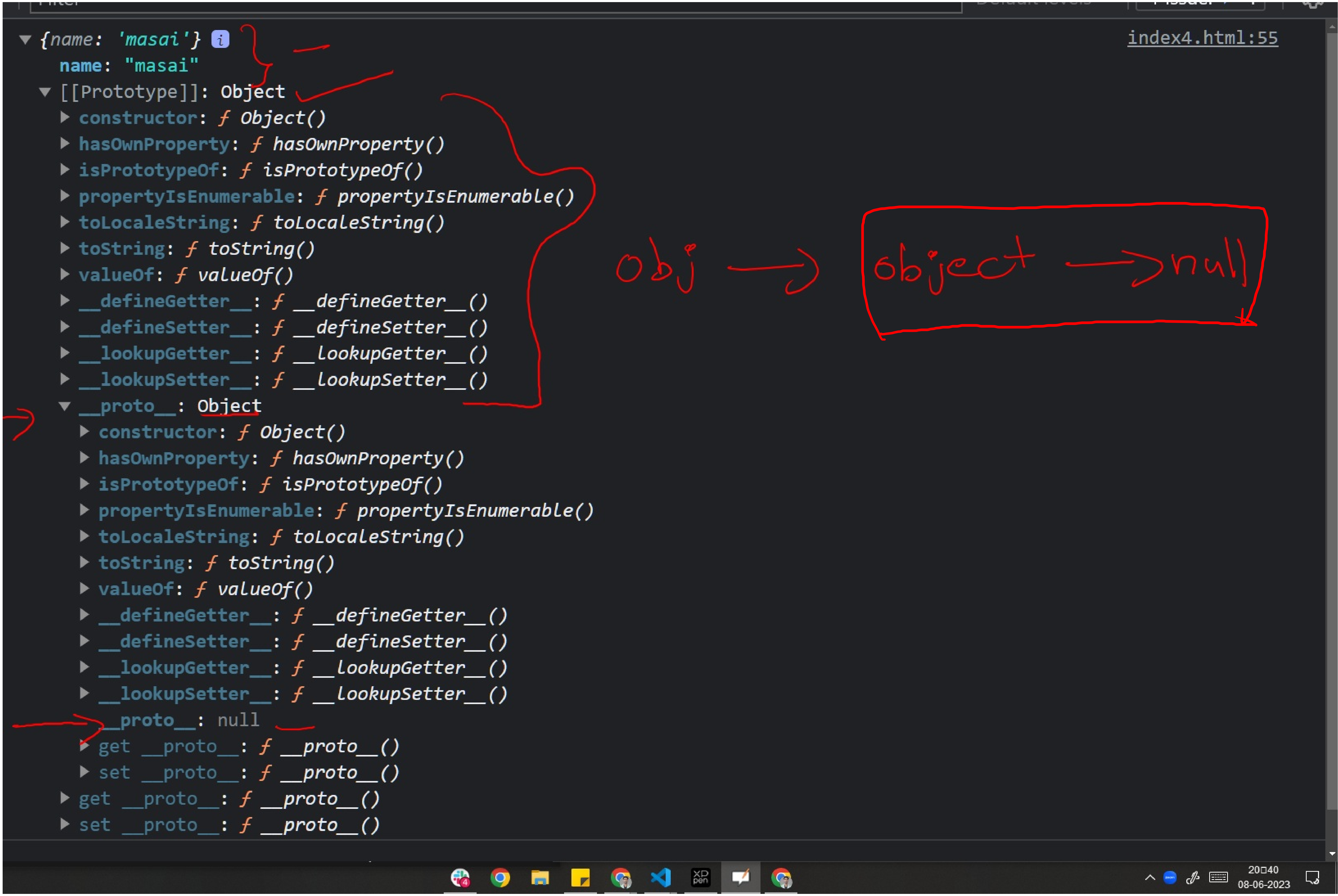
```
</html>
<script>
  // inheritance

  let grandFather = {
    name: "goku",
    lastName: "sharma",
    DNA: "123",
  };

  //   let Father = {
  //     name: "gohan",
  //     lastName: "sharma",
  //     DNA: "123",
  //   };

  let Father = Object.create(grandFather); // it is
  creating a object with grandFather properties it has
  inherited;

  Father.name = "gohan";

  console.log(Father);
</script>
```

```
Live reload enabled.                         index3.html:37
▼ Object ℹ                                   index3.html:68
    name: "gohan"
  ▼ [[Prototype]]: Object
      DNA: "123"
      lastName: "sharma"
      name: "goku"
    ▶ [[Prototype]]: Object
>
```



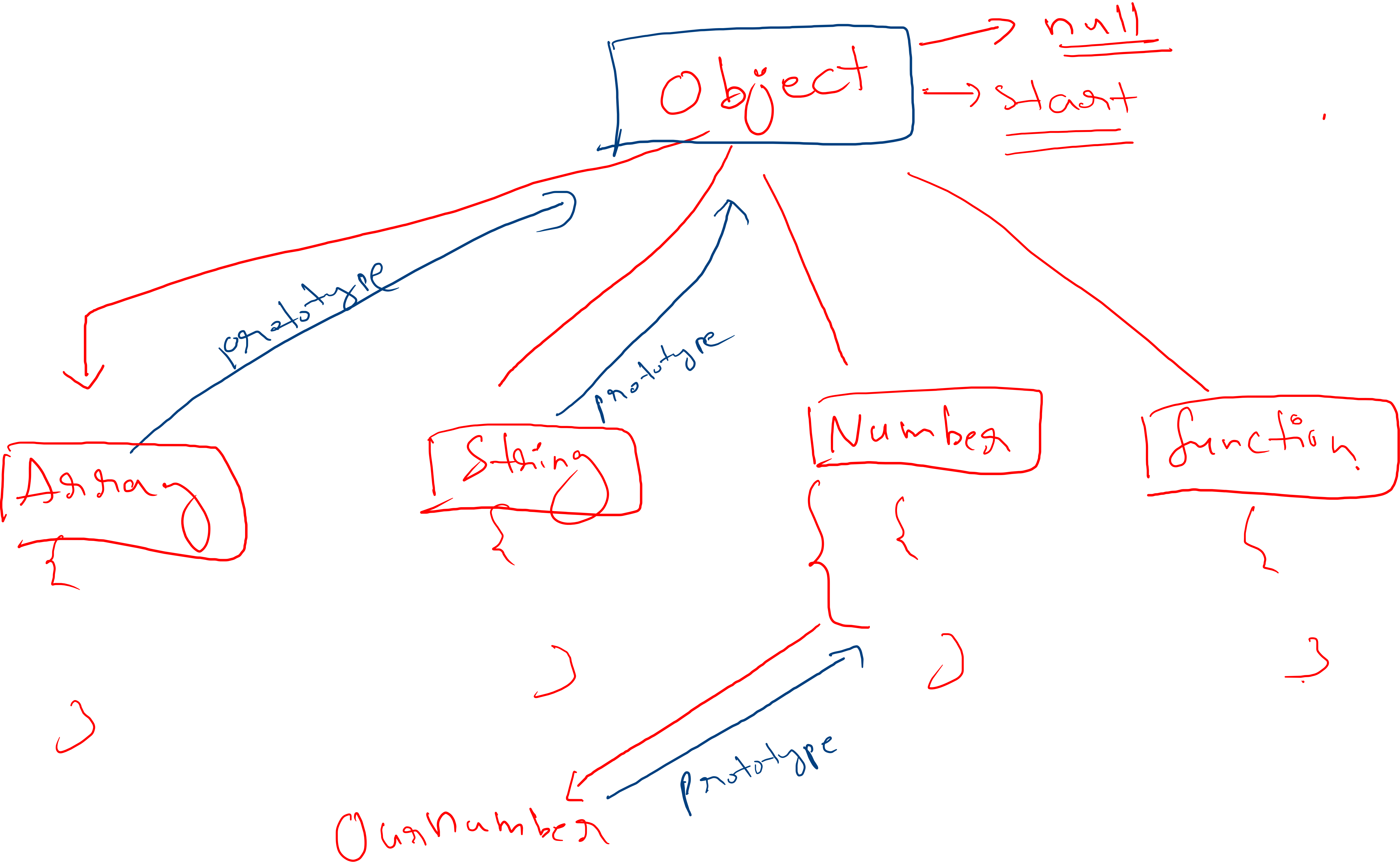
```
// inheritance

let grandFather = {
  name: "goku",
  lastName: "sharma",
  DNA: "123",
};

//   let Father = {
//     name: "gohan",
//     lastName: "sharma",
//     DNA: "123",
//   };

let Father = Object.create(grandFather); // it is creating a object with grandFather properties it has inherited;

Father.name = "gohan";
Father.houseName = "Dragon ball";
Father.bloodGroup = "o+";

let son = Object.create(Father);

son.name = "picalo";

console.log(son);
```

```
▼ {name: 'picalo'} ℹ                          index3.html:74
    name: "picalo"
  ▼ [[Prototype]]: Object
      bloodGroup: "o+"
      houseName: "Dragon ball"
      name: "gohan"
    ▼ [[Prototype]]: Object
        DNA: "123"
        lastName: "sharma"
        name: "goku"
      ▶ [[Prototype]]: Object
>
```

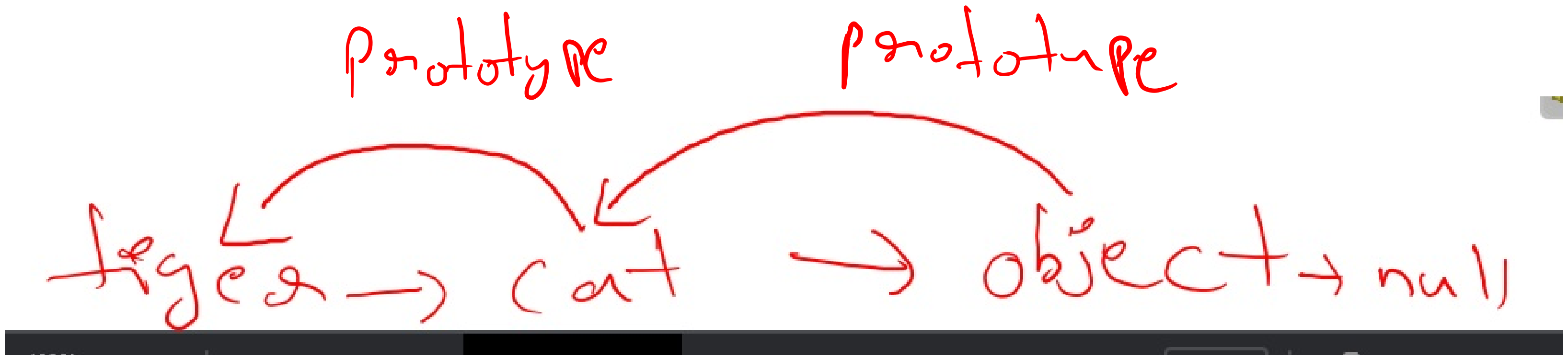


```
▼ {name: 'masai'} ℹ                                              index4.html:55
    name: "masai"
  ▼ [[Prototype]]: Object
    ▶ constructor: ƒ Object()
    ▶ hasOwnProperty: ƒ hasOwnProperty()
    ▶ isPrototypeOf: ƒ isPrototypeOf()
    ▶ propertyIsEnumerable: ƒ propertyIsEnumerable()
    ▶ toLocaleString: ƒ toLocaleString()
    ▶ toString: ƒ toString()
    ▶ valueOf: ƒ valueOf()
    ▶ __defineGetter__: ƒ __defineGetter__()
    ▶ __defineSetter__: ƒ __defineSetter__()
    ▶ __lookupGetter__: ƒ __lookupGetter__()
    ▶ __lookupSetter__: ƒ __lookupSetter__()
    ▼ __proto__: Object
      ▶ constructor: ƒ Object()
      ▶ hasOwnProperty: ƒ hasOwnProperty()
      ▶ isPrototypeOf: ƒ isPrototypeOf()
      ▶ propertyIsEnumerable: ƒ propertyIsEnumerable()
      ▶ toLocaleString: ƒ toLocaleString()
      ▶ toString: ƒ toString()
      ▶ valueOf: ƒ valueOf()
      ▶ __defineGetter__: ƒ __defineGetter__()
      ▶ __defineSetter__: ƒ __defineSetter__()
      ▶ __lookupGetter__: ƒ __lookupGetter__()
      ▶ __lookupSetter__: ƒ __lookupSetter__()
        __proto__: null
      ▶ get __proto__: ƒ __proto__()
      ▶ set __proto__: ƒ __proto__()
    ▶ get __proto__: ƒ __proto__()
    ▶ set __proto__: ƒ __proto__()
```

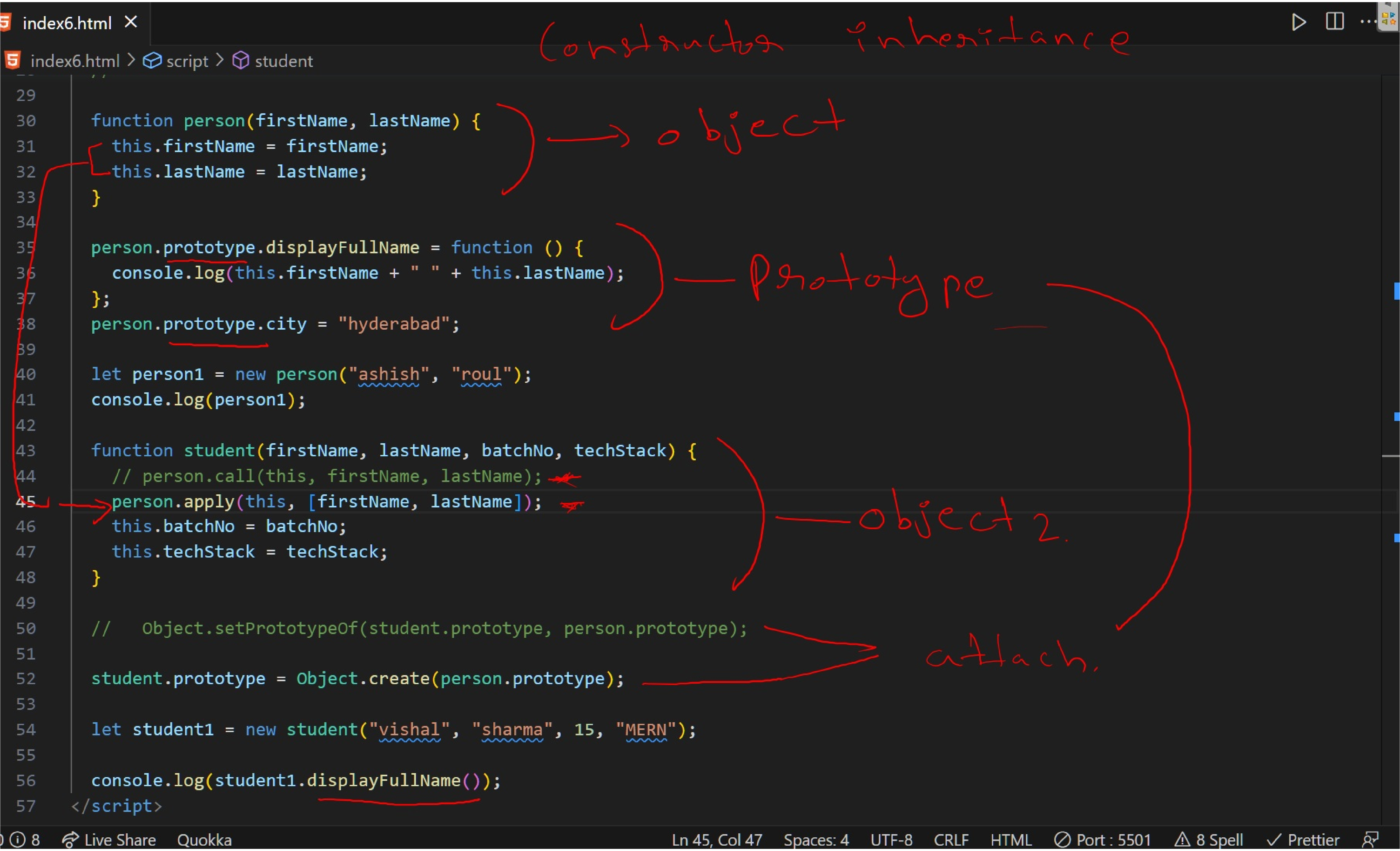
obj → object → null


Object
null
start
prototype
prototype
Array
String
Number
function
prototype
OurNumber

Prototypal Chain



Constructor inheritance



```
  function person(firstName, lastName) {
    this.firstName = firstName;
    this.lastName = lastName;
  }

  person.prototype.displayFullName = function () {
    console.log(this.firstName + " " + this.lastName);
  };
  person.prototype.city = "hyderabad";

  let person1 = new person("ashish", "roul");
  console.log(person1);

  function student(firstName, lastName, batchNo, techStack) {
    // person.call(this, firstName, lastName);
    person.apply(this, [firstName, lastName]);
    this.batchNo = batchNo;
    this.techStack = techStack;
  }

  //   Object.setPrototypeOf(student.prototype, person.prototype);

  student.prototype = Object.create(person.prototype);

  let student1 = new student("vishal", "sharma", 15, "MERN");

  console.log(student1.displayFullName());
</script>
```

→ object

— Prototype

— object 2.

attach.