**JS Objects**

An object in programming is**an entity that has properties**. Each property defines a characteristic of the object. A property can be information associated with the object (the color of the pen) or action (the pen's ability to write).

When using OOP, you write, create, and modify objects, and the objects make up your program.

**Creating an object**: create a new object in Javascript by setting its properties within a pair of curly braces {..};

e.g.

var pen = {

type: "ballpoint",

color: "blue",

brand: "cello"

};

**Getting a value:** After creating the object, you can access the value of its properties using dot notation such as myObject.myProperty.

e.g.

console.log(pen.type); // will be "ballpoint"

console.log(pen.color); // will be "blue"

console.log(pen.brand); // will be "cello"

**Modifying objects:** Once an object is created, you can change the values of its properties with the syntaxmyObject.myProperty = newValue.

e.g.

var pen = {

type: "ballpoint",

color: "blue",

brand: "cello"

};

Pen.color= "black";

**Methods on objects:** A property whose value is a function is called a method.

e.g.

// Describe a pen

function describe(pen) {

var description = "My pen is a " + pen.color + " " + pen.brand + " " + pen.type + " pen.";

return description;

}

console.log(describe(pen));

**Example program using object**

<script>

var Pastry={

//initialize

init:function(type,flavor,levels,price, occasions){

this.type=type;

this.flavor=flavor;

this.levels=levels;

this.price=price;

this.occasions=occasions;

},

//Pastry.prototype.describe=function {

describe: function(){

var description="the"+this.type+"is a" + this.occasions + "pastry,has a"+ this.flavor+ "flavors"

+this.levels+"layers and costs"+ this.price + ".";

return description;

},

};

var muffin= Object.create(Pastry);

muffin.init("muffin","chocolate",3,"$10", "birthday");

console.log(muffin.describe());

//instead using new when calling constructor

var cake=new Pastry("cake","vanilla",3,"$10","birthday");

console.log(cake.describe());

</script>