

Experiment No:-4

Date:-

## Javascript

Course Name: Javascript

Module Name: Types of Functions, Declaring and Invoking Function, Arrow Function, Function Parameters, Nested Function, Built-in Functions, Variable Scope in Functions

Write a JavaScript code to book movie tickets online and calculate the total price based on the 3 conditions:

- (a) If seats to be booked are not more than 2, the cost per ticket remains Rs. 150.
- (b) If seats are 6 or more, booking is not allowed.
- (c) If seats to be booked are more than 2 but less than 6, based on the number of seats booked, do the following - Calculate total cost by applying a discount of 3, 5, 7, 9, 11 percent, and so on for customers till 5 respectively. Try the code with different values for the number of seats. Write the following custom functions to implement given requirements:
  - i. calculateCost(seats): Calculate and display the total cost to be paid by the customer for the tickets they have bought.
  - ii. calculateDiscount(seats): Calculate discount on the tickets bought by the customer. Implement using arrow functions.

Aim: To write a Javascript code to book movie tickets online and calculate the total price based on the given 3 conditions using functions.

Syntax:

```
function name(parameter1, parameter2, parameter3)
{
  // code to be executed
}
```

Program:-

```
<html>
<head>
<title>TicketsBooking</title>
<script>
var x; var
y; var z;
fun=()=>
{
```

```

    var a=prompt("Enter the number of tickets:");
    if(a<6)
    {
        document.getElementById("id").innerHTML="Total amount you need to pay:";
        document.getElementById("id1").innerHTML="Rs."+calculateCost(a);
        document.getElementById("id2").innerHTML="Discount Amount is:
Rs."+calculateDiscount(a);
    }
    else
    {
        document.getElementById("id").innerHTML="Sorry! You can book upto 5 tickets only in
online!!";
        document.getElementById("id1").innerHTML="";
        document.getElementById("id2").innerHTML="";
    }
}
const p=150;
calculateCost=(a)=>{v
ar i=1;
s=0;
j=0;
k=0.03
if(a>2 && a<6)
{
do
{
j=p-(p*k);
s+=j; j=0;
k+=0.02;
i+=1
}
while(i<=a);
}

```

```

else if(a<=2)
{
    s=p*a;    }

else
s=0;
return s;
}
calculateDiscount=(a)=>
{
var g=calculateCost(a);
var z=a*p;
return z-g;
}
</script>
</head>
<body bgcolor="cyan">
<center><h1><i>ShopTime</i></h1></center>
<h2 align="center"><i>One stop for all your needs</i></h2>
<header>
<nav align="center"><h3>
    Home || Login || Register || Wishlist || My
    Orders || Help</h3>
</nav>
<center>
</header>
<h2>Book your tickets now</h2>
<br>
<input type="button" value="BOOK TICKETS"
onclick="fun()">
<p id="id"></p>
<p id="id1"></p>
<p id="id2"></p>
</body>
<footer>

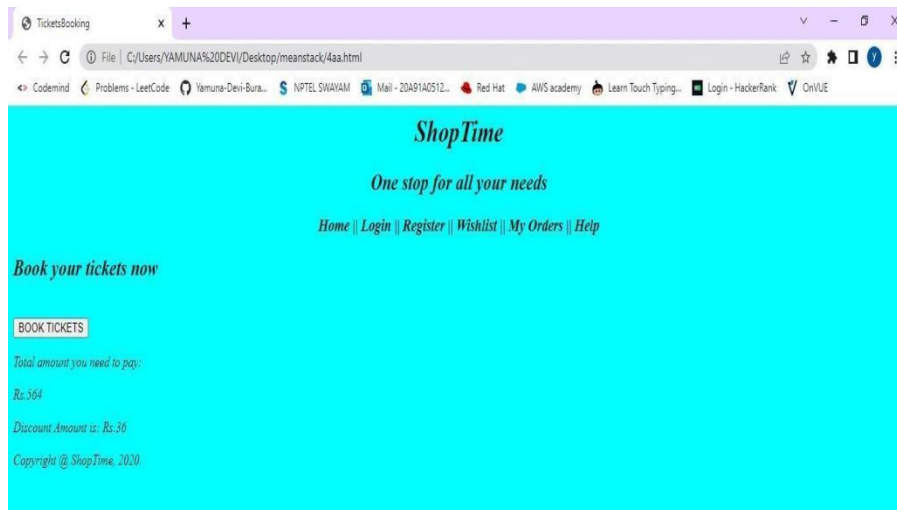
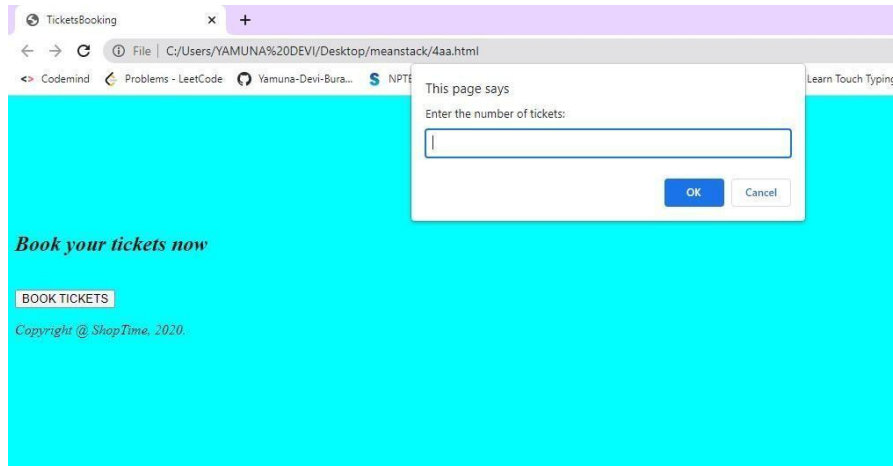
```

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</footer>

</html>

Output:-



Exp No : 4.b

Date :

Course Name: Javascript

Module Name: Working With Classes, Creating and Inheriting Classes

Create an Employee class extending from a base class Person. Hints:

- (i) Create a class Person with name and age as attributes.
  - (ii) Add a constructor to initialize the values
  - (iii) Create a class Employee extending Person with additional attributes role and contact
  - (iv) The constructor of the Employee to accept the name, age, role and contact where name and age are initialized through a call to super to invoke the base class constructor
  - (v) Add a method getDetails() to display all the details of Employee
- Aim: To

write a Javascript with classes, creating and inheriting classes. Program:-

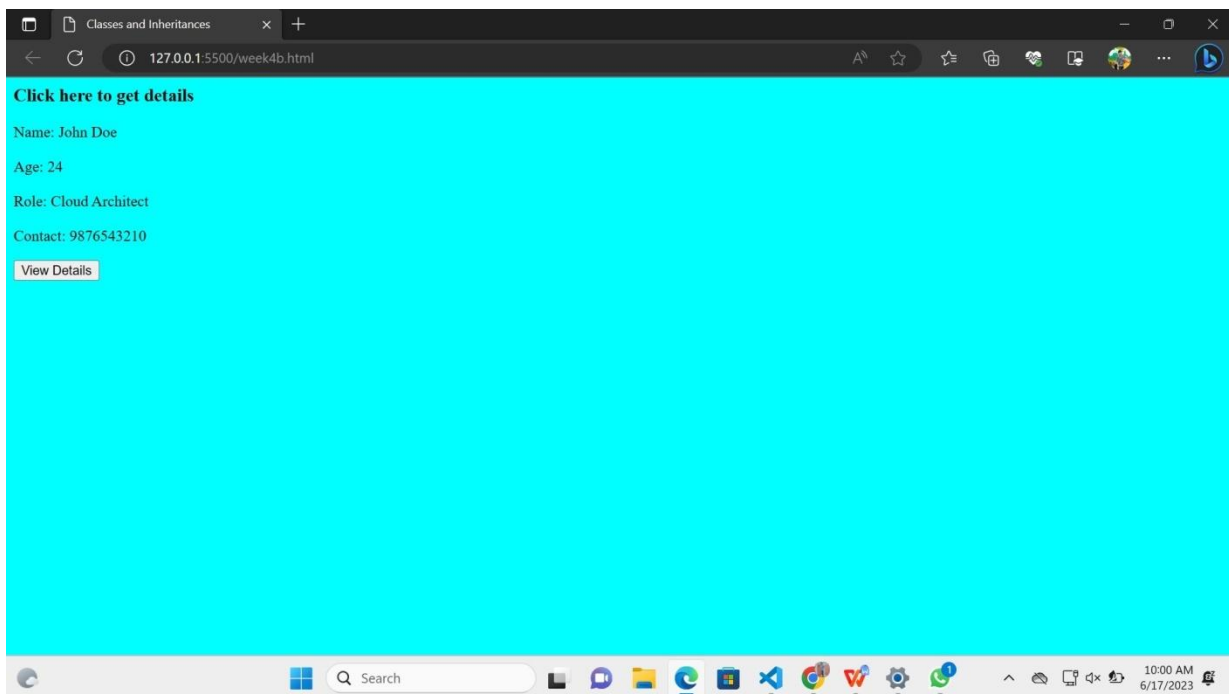
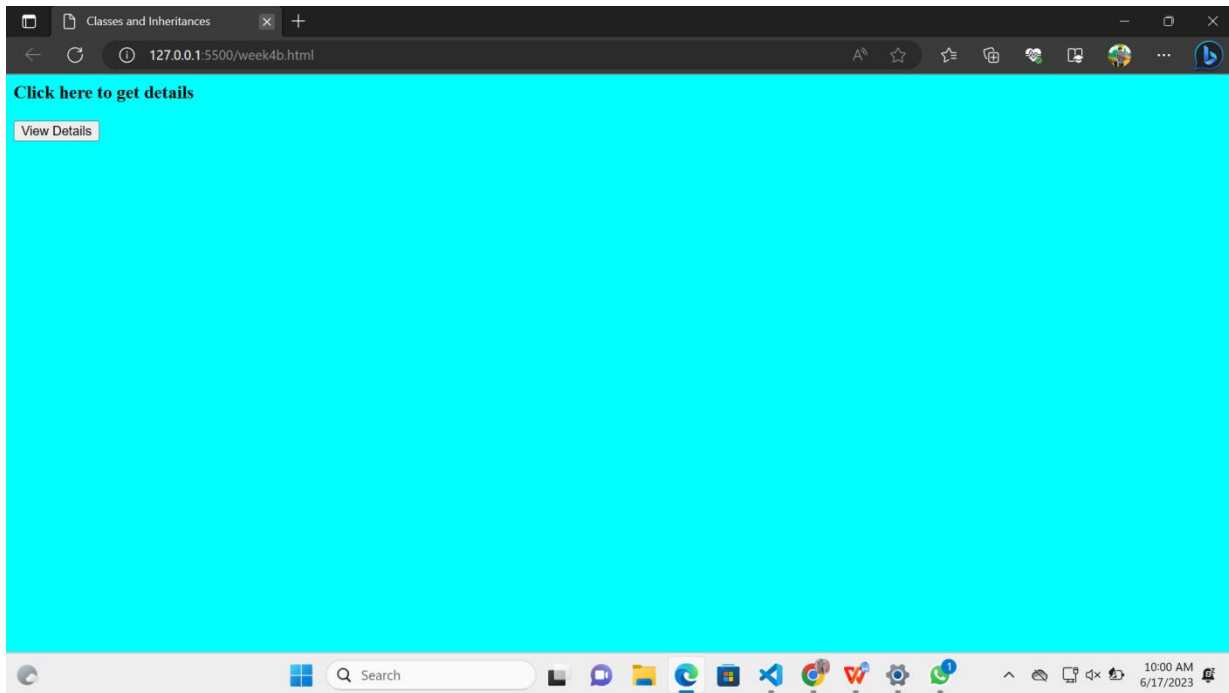
```
<html>
<head>
<title>Classes and Inheritances</title>
<script>
    class Person
    {
        constructor(name,age)
        {
            this.name=name; this.age=age;
        }
        det()
        {
            return "Name: "+this.name+"<br>"+<br>"+Age: "+this.age;
        }
    }
    class Employee extends Person
    {
        constructor(name,age,role,contact)
        {
            super(name,age);
            this.roll=role;
            this.contact=contact;
        }
    }
</script>
</head>
</html>
```

```

getDetails()
{
    return this.det()+"<br>"+<br>"+Role: "+this.roll+"<br>"+<br>"+Contact:
"+this.contact;
}
}
function fun()
{
    let v=new Employee("John Doe",24,"Cloud Architect","9876543210");
    document.getElementById("id1").innerHTML=v.getDetails();
}
</script>
</head>
<body bgcolor="cyan">
<h1 style="background-color:rgb(223, 56, 56)"><center></center></h1>
<h3>Click here to get details </h3>
<p id="id1">
</p></center>
<input type="button" value="View Details" onclick="fun()">
</body>
</html>

```

Output:-



Exp No : 4.c

Date :

Course Name: Javascript Module Name: In-built Events and Handlers

Write a JavaScript code to book movie tickets online and calculate the total price based on the 3 conditions:

- (a) If seats to be booked are not more than 2, the cost per ticket remains Rs. 150.
- (b) If seats are 6 or more, booking is not allowed.
- (c) If seats to be booked are more than 2 but less than 6, based on the number of seats booked, do the following - Calculate total cost by applying discounts of 3, 5, 7, 9, 11 percent, and so on for customer 1,2,3,4 and 5. Try the code with different values for the number of seats. Write the following custom functions to implement given requirements:

(i) calculate Cost(seats): Calculate and display the total cost to be paid by the customer for the tickets he has bought.

(ii) calculate Discount(seats): Calculate discount on the tickets bought by the customer. Invoke this function only when the user clicks on a link/button.

Aim: To write a Javascript code to book movie tickets online and calculate the total price.

Program:-

```
<html>
<head>
<title>TicketsBooking</title>
<script>      var x;
var y;
var z;      fun=()=>
{
var a=prompt("Enter the number of tickets:");      if(a<6)
{
document.getElementById("id").innerHTML="Total amount you need to pay:";
document.getElementById("id1").innerHTML="Rs."+calculateCost(a);
document.getElementById("id2").innerHTML="Discount Amount is:
Rs."+calculateDiscount(a);
}      else      {
document.getElementById("id").innerHTML="Sorry! You can book upto 5 tickets only in
online!!";
document.getElementById("id1").innerHTML="";
document.getElementById("id2").innerHTML="";
```



```

    }
}
const p=150;
calculateCost=(a)=>{v
ar i=1;
s=0; j=0;
k=0.03;
if(a>2 && a<6)
{
do
{
j=p-(p*k);          s+=j;          j=0;          k+=0.02;          i+=1;
}
while(i<=a);
}
else if(a<=2)
{
s=p*a;
}
else
s=0;

return s;
}
calculateDiscount=(a)=>
{
var g=calculateCost(a);          var z=a*p;
return z-g;
}
</script>
</head>
<body bgcolor="cyan">
<center><h1><i>ShopTime</i></h1></center>

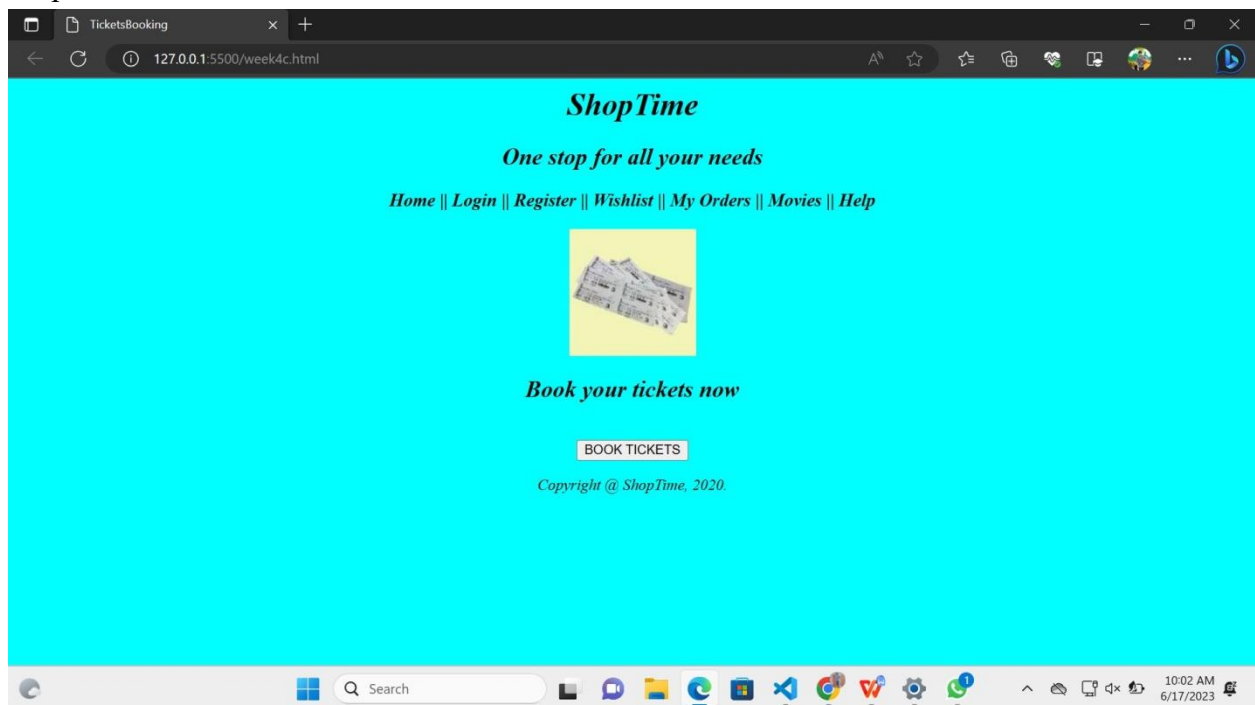
```

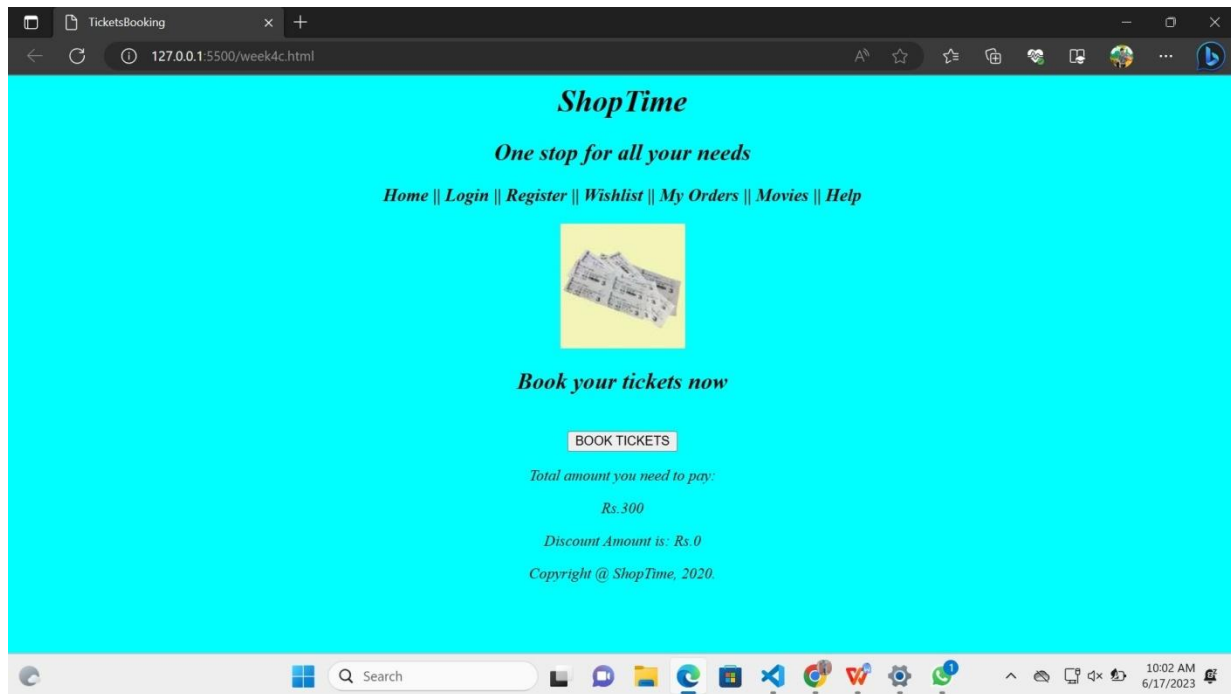
```

<h2 align="center"><i>One stop for all your needs</i></h2>
<header>
<nav align="center"><h3>
    Home || Login || Register || Wishlist || My
    Orders || Movies || Help</h3>
</nav>
<center>
</header>
<center></img>
<h2>Book your tickets now</h2>
<br>
<input type="button" value="BOOK TICKETS"      onclick="fun()"><p id="id"></p>
<p id="id1"></p>
<p id="id2"></p>
</body>
<footer>
    Copyright @ ShopTime, 2020.
</footer></center>
</html>

```

Output:-





Exp No : 4.d

Date :

Course Name: Javascript

Module Name: Working with Objects, Types of Objects, Creating Objects, Combining and cloning Objects using Spread operator, Destructuring Objects, Browser Object Model, Document Object Model

If a user clicks on the given link, they should see an empty cone, a different heading, and a different message and a different background color. If a user clicks again, they should see a refilled cone, a different heading, a different message, and a different color in the background.

Aim: To write a Javascript with Objects, Creating Objects, Combining and cloning Objects using Spread operator, Destructuring Objects, Browser Object Model, Document Object Model.

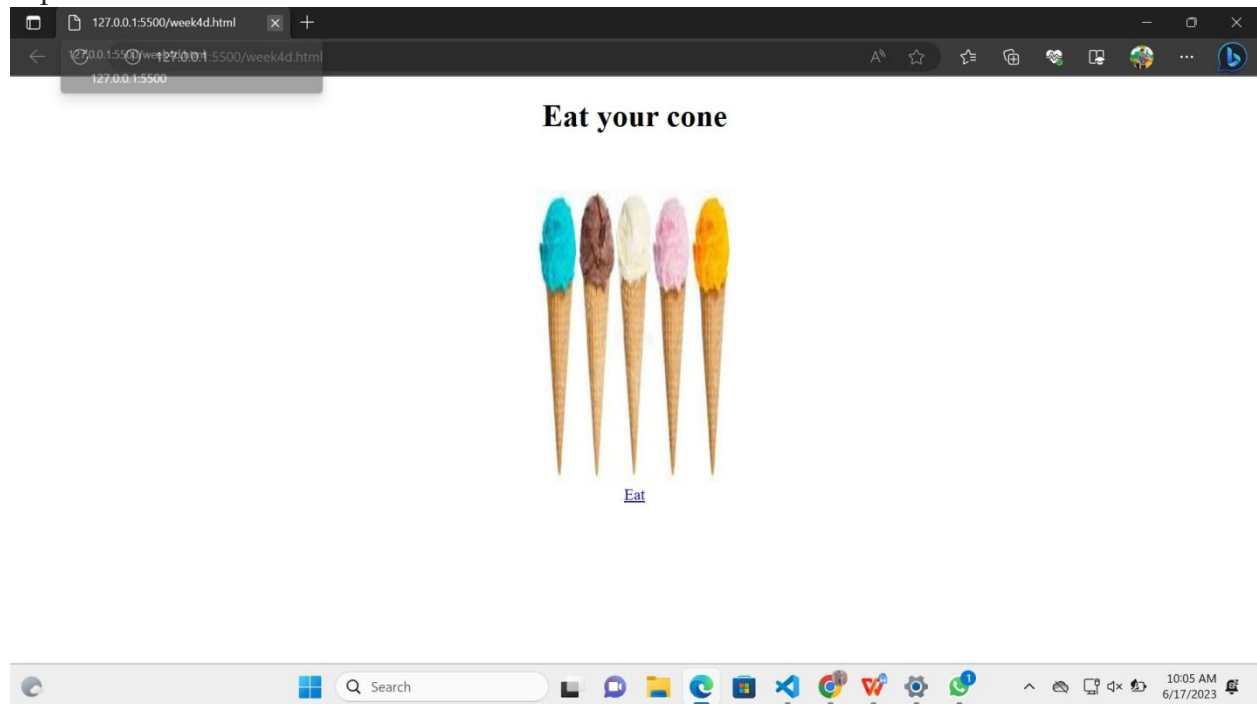
Program:-

```
<!DOCTYPE html>
<html><script>    var c=0;    function fun()
{    if(c==0)
{
document.body.style.backgroundColor = "cyan";
document.getElementById("id1").innerHTML="Fill your cone";
document.getElementById("imag").src="ice.jpg";
document.getElementById("link").innerHTML="Fill";
c=1;
}
else
{
document.body.style.backgroundColor = "pink";
document.getElementById("id1").innerHTML="Eat your cone";
document.getElementById("imag").src="ice.jpg";
document.getElementById("link").innerHTML="Eat";
c=0;
}
}
</script>
<center>
<h1 id="id1">Eat your cone</h1>
<br><br>
```

```

<br>
<a href="javascript:fun()" id="link">Eat</a>
</center>
</body>
</html>
```

Output:-



Output:-

