

**A:**

Name:Kailash Nath  
Regd. No.:Y21CS065  
Enter the year :

This page says  
2604 is a leap year.

**B:**

Name:Kailash Nath  
Regd. No.:Y21CS065  
Enter the three numbers :  
  
**a**  
  
  
**b**  
  
  
**c**

This page says  
78 is biggest of all three

## LAB CYCLE-2

1.

**a.Aim: Find the given year is leap year or not.**

```
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>1a</title>
  </head>
  <body>
    <script>
      function isLeapYear()
      {
        let y = parseInt(document.getElementById("year").value);
        if(y == "")
          window.alert("Enter the year to compute.");
        else if ((y%4==0) && ((y%400==0) || (y%100!=0)))
          window.alert(y+" is a leap year.");
        else
          window.alert( y + " is not a leap year.");
      }
    </script>
    <label><b>Enter the year : </b></label><br>
    <input type="text" id = "year"><br><br>
    <button onclick="isLeapYear()">Check Leap Year</button>
  </body>
</html>
```

**b.Aim: Compute the biggest of three numbers.**

```
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>1b</title>
  </head>
  <body>
    <script>
      function greaterNum()
      {
        a = parseInt(document.getElementById("a").value)
        b = parseInt(document.getElementById("b").value)
        c = parseInt(document.getElementById("c").value)
        s = ((a>b) && (a>c))?a:((b>c) ? b:c)
        alert(s+" is biggest of all three")
      }
    </script>
    <p>Enter the three numbers : </p>
    <label><b>a</b></label><br>
```

Regd. No.: Y21CS065

```
<input type="text" id = "a"><br><br>
<label><b>b</b></label><br>
```

C:

Name:Kailash Nath  
Regd. No.:Y21CS065

Enter the two numbers :

**a**

56

**b**

44

**Enter the arithimetic operator :**

+

Do Operation

This page says

After addition the result is : 100

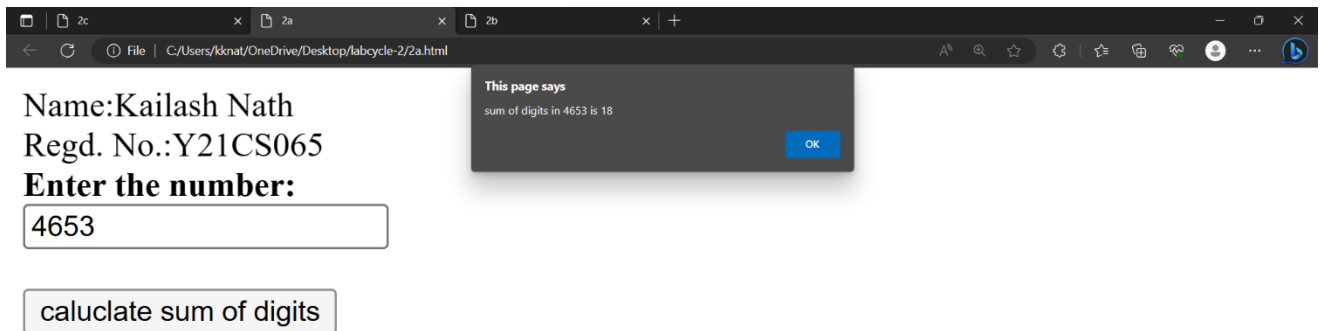
OK

```
<input type="text" id = "b"><br><br>
<label><b>c</b></label><br>
<input type="text" id = "c"><br><br>
<button onclick="greaterNum()">Check greatest number</button><br>
</body>
</html>
```

**c.Aim: Perform the arithmetic operations using switch statement.**

```
<html>
<head>
  Name:Kailash Nath<br>
  Regd. No.:Y21CS065<br>
  <title>1c</title>
</head>
<body>
  <script>
    function arithOp()
    {
      a = parseInt(document.getElementById("a").value);
      b = parseInt(document.getElementById("b").value);
      choice = document.getElementById("ch").value;
      switch(choice)
      {
        case '+': alert("After addition the result is : "+(a+b));break;
        case '-': alert("After subtraction the result is : "+(a-b));break;
        case '*': alert("After multiplication the result is : "+(a*b));break;
        case '**': alert("After caluclation the result is : "+(a**b));break;
        case '/': alert("After division the result is : "+(a/b));break;
        case '%': alert("After modulo division the result is : "+(a%b));break;
        case '++': alert("After incrementing of a the result is : "+(a++));break;
        case '--': alert("After decrementing of a the result is : "+(a--));break;
        default:alert("Invalid Option Try Again!");
      }
    }
  </script>
  <p>Enter the two numbers : </p>
  <label><b>a</b></label><br>
  <input type="text" id = "a"><br><br>
  <label><b>b</b></label><br>
  <input type="text" id = "b"><br><br>
  <label><b>Enter the arithimetic operator : </b></label><br>
  <input type="text" id = "ch"><br><br>
  <button onclick="arithOp()">Do Operation</button><br>
</body>
</html>
```

A:

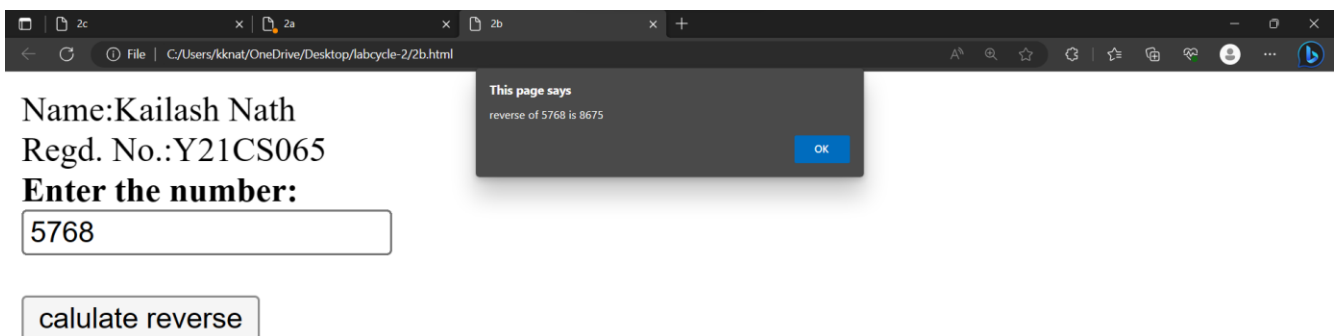


The screenshot shows a web browser window with three tabs labeled '2c', '2a', and '2b'. The address bar shows the file path 'C:/Users/kkmat/OneDrive/Desktop/labcycle-2/2a.html'. The page content includes the text 'Name:Kailash Nath', 'Regd. No.:Y21CS065', and 'Enter the number:'. Below this is a text input field containing the number '4653'. A button labeled 'caluclate sum of digits' is positioned below the input field. A dark grey tooltip box is visible over the input field, displaying the text 'This page says' and 'sum of digits in 4653 is 18', with an 'OK' button at the bottom right.

Name:Kailash Nath  
Regd. No.:Y21CS065  
**Enter the number:**  
4653  
caluclate sum of digits

This page says  
sum of digits in 4653 is 18  
OK

B:



The screenshot shows a web browser window with three tabs labeled '2c', '2a', and '2b'. The address bar shows the file path 'C:/Users/kkmat/OneDrive/Desktop/labcycle-2/2b.html'. The page content includes the text 'Name:Kailash Nath', 'Regd. No.:Y21CS065', and 'Enter the number:'. Below this is a text input field containing the number '5768'. A button labeled 'calulate reverse' is positioned below the input field. A dark grey tooltip box is visible over the input field, displaying the text 'This page says' and 'reverse of 5768 is 8675', with an 'OK' button at the bottom right.

Name:Kailash Nath  
Regd. No.:Y21CS065  
**Enter the number:**  
5768  
calulate reverse

This page says  
reverse of 5768 is 8675  
OK

## 2. Write a java script to

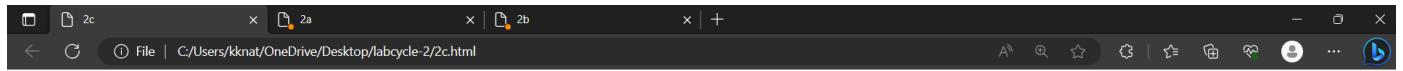
a.Aim: Calculate the sum of the digits of a give number.

```
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>2a</title>
  </head>
  <body>
    <script>
      function sum()
      {
        i = n = parseInt(document.getElementById("number").value);
        s = 0;
        let d;
        while(i!=0)
        {
          d=i%10;
          s+=d;
          i=(i-d)/10;
        }
        alert("sum of digits in "+n+" is "+s);
      }
    </script>
    <label><b>Enter the number: </b></label><br>
    <input type="text" id = "number"><br><br>
    <button onclick="sum()">caluclate sum of digits</button>
    <p id = "result"></p>
  </body>
</html>
```

b.Aim: Reverse of a given number.

```
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>2b</title>
  </head>
  <body>
    <script>
      function reverse()
      {
        i = n = parseInt(document.getElementById("number").value);
        s = 0;
        d = 0;
        while(i!=0)
        {
          d = i%10;
          s = 10*s+d;
        }
      }
    </script>
  </body>
</html>
```

C:



Name: Kailash Nath

Regd. No.: Y21CS065

The first ten natural numbers except 5 are

- 1
- 2
- 3
- 4
- 6
- 7
- 8
- 9
- 10

Regd. No.: Y21CS065

```
        i = (i-d)/10
    }
    alert("reverse of "+n+" is "+s);
}
</script>
<label><b>Enter the number: </b></label><br>
<input type="text" id = "number"><br><br>
<button onclick="reverse()">calculate reverse </button>
<p id = "result"></p>
</body>
</html>
```

**c.Aim:** Print the first 10 natural numbers except 5.

```
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>2c</title>
  </head>
  <body>
    <script>
      document.write("The first ten natural numbers except 5 are<br>");
      for (let i = 1; i<=10; i++)
      {
        if(i!=5)
        {
          document.write(i);
          document.write("<br>");
        }
      }
    </script>
  </body>
</html>
```



A:

Name: Kailash Nath  
Regd. No.: Y21CS065  
Enter the number:  
  
Enter the second number for GCD:  
  
caluclate GCD  
caluclate reverse  
random number  
This page says  
GCD of 48&12 is 12  
OK

Name: Kailash Nath  
Regd. No.: Y21CS065  
Enter the number:  
  
Enter the second number for GCD:  
  
caluclate GCD  
caluclate reverse  
random number  
This page says  
reverse of 48 is 84  
OK

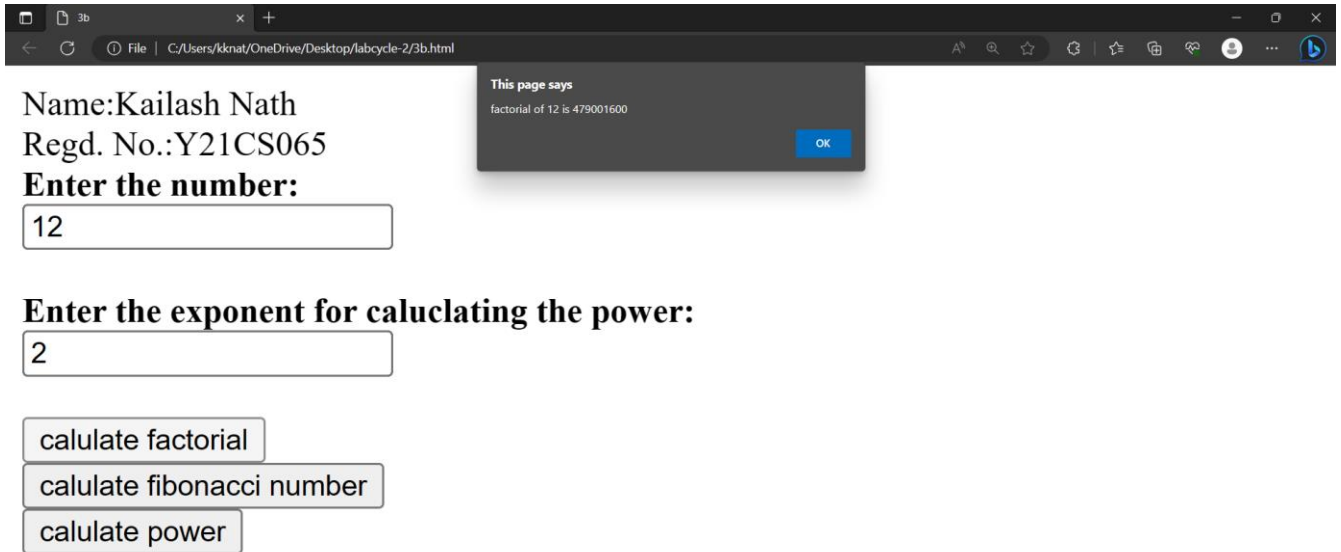
Name: Kailash Nath  
Regd. No.: Y21CS065  
Enter the number:  
  
Enter the second number for GCD:  
  
caluclate GCD  
caluclate reverse  
random number  
This page says  
random number is : 32  
OK

### 3. Write a java script to

**a.Aim:** functions (GCD, reverse, random numbers)

```
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>3a</title>
  </head>
  <body>
    <script>
      function GCD()
      {
        let n1= document.getElementById("a").value;
        let n2= document.getElementById("b").value;
        function findGCD(n1,n2)
        {
          return (n1 == 0) ? n2 : findGCD(n2%n1,n1);
        }
        alert("GCD of "+n1+"&"+n2+" is "+findGCD(n1,n2));
      }
      function reverse()
      {
        i = n = parseInt(document.getElementById("a").value);
        s = 0;
        d = 0;
        while(i!=0)
        {
          d = i%10;
          s = 10*s+d;
          i = (i-d)/10
        }
        alert("reverse of "+n+" is "+s);
      }
      function randNum()
      {
        alert("Generated random number is : "+Math.floor(Math.random() * 101));
      }
    </script>
    <label><b>Enter the number: </b></label><br>
    <input type="text" id = "a"><br><br>
    <label><b>Enter the second number for GCD: </b></label><br>
    <input type="text" id = "b"><br><br>
    <button onclick="GCD()">caluclate GCD</button><br>
    <button onclick="reverse()">caluclate reverse</button><br>
    <button onclick="randNum()">random number</button><br>
    <p id = "result"></p>
  </body>
</html>
```

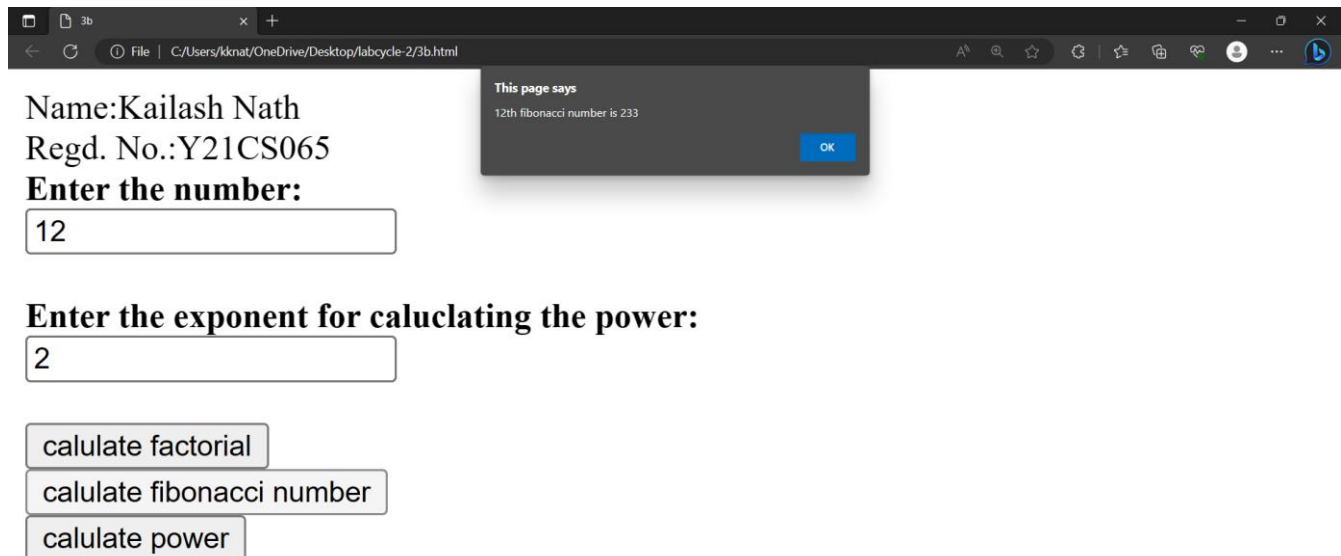
B:



Name: Kailash Nath  
Regd. No.: Y21CS065  
Enter the number:

Enter the exponent for calculating the power:

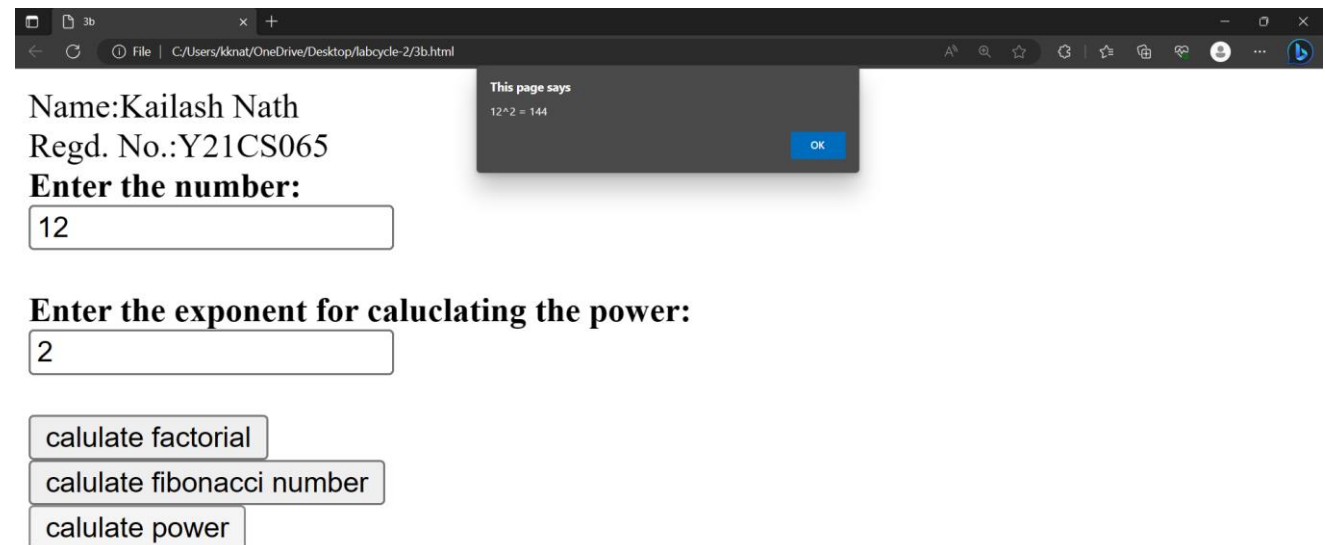
This page says  
factorial of 12 is 479001600  
OK



Name: Kailash Nath  
Regd. No.: Y21CS065  
Enter the number:

Enter the exponent for calculating the power:

This page says  
12th fibonacci number is 233  
OK



Name: Kailash Nath  
Regd. No.: Y21CS065  
Enter the number:

Enter the exponent for calculating the power:

This page says  
 $12^2 = 144$   
OK

**b.Aim:** recursive function(factorial, Fibonacci , power)

```
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>3b</title>
  </head>
  <body>
    <script>
      function fact()
      {
        i = n = parseInt(document.getElementById("number").value);
        f = 1
        function factorial(i)
        {
          return (i==1)?1:i*factorial(i-1);
        }
        alert("factorial of "+n+" is "+factorial(i));
      }
      function fib()
      {
        i = n = parseInt(document.getElementById("number").value);
        function fibonacci(i)
        {
          return (i==0 || i==1)?1:fibonacci(i-1)+fibonacci(i-2);
        }
        alert(n+"th fibonacci number is "+fibonacci(i));
      }
      function pow()
      {
        a = parseInt(document.getElementById("number").value);
        b = parseInt(document.getElementById("b").value);
        function power(a,b)
        {
          return (a==0)?0:((b==0)?1:a*power(a,b-1));
        }
        alert(a+"^"+b+" = "+power(a,b));
      }
    </script>
    <label><b>Enter the number: </b></label><br>
    <input type="text" id = "number"><br><br>
    <label><b>Enter the exponent for caluclating the power: </b></label><br>
    <input type="text" id = "b"><br><br>
    <button onclick="fact()">calulate factorial </button><br>

    <button onclick="fib()">calulate fibonacci number </button><br>
    <button onclick="pow()">calulate power</button><br>
    <p id = "result"></p>
  </body>
</html>
```

C:



Name:Kailash Nath  
Regd. No.:Y21CS065

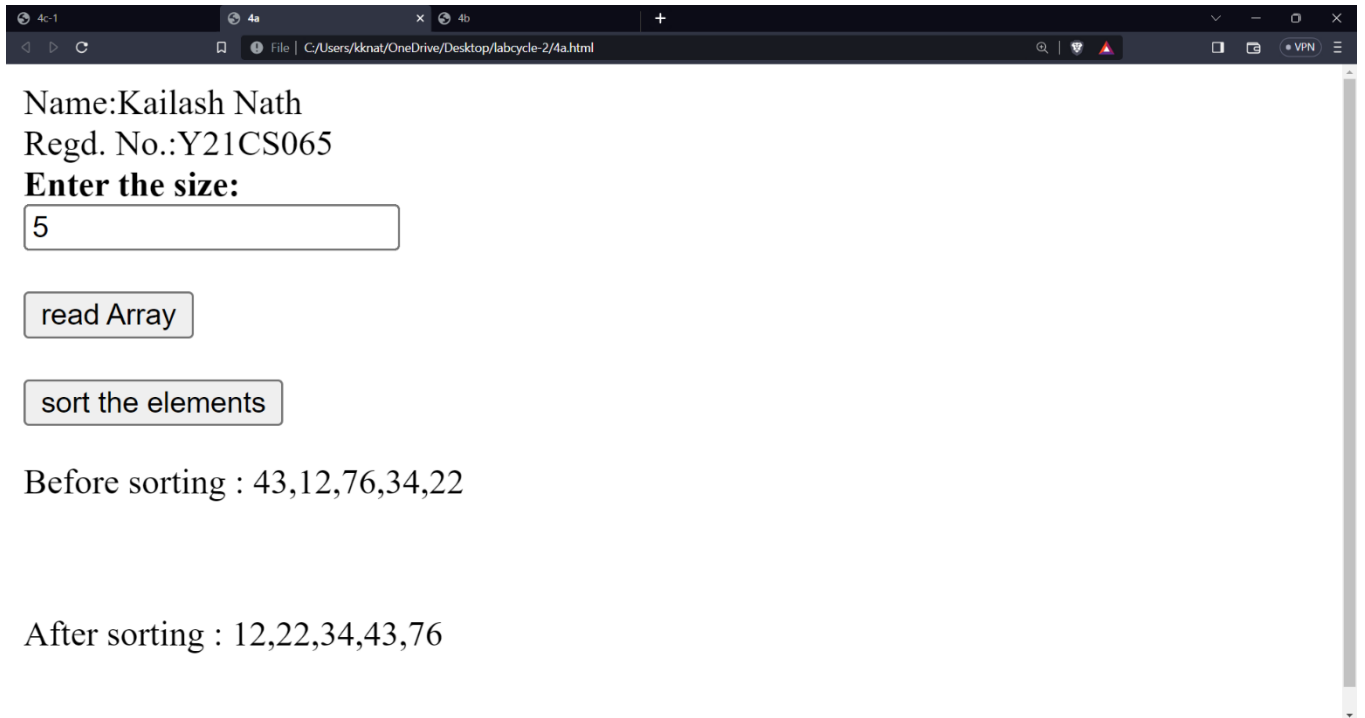
## Image Generator



**c.Aim:** image generator

```
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>3c</title>
  </head>
  <body>
    <h1>Image Generator</h1><br>
    <img id = "image" src="" width="500" height="500">
    <script>
      const pics = ["img1.jfif","img2.jfif","img3.jfif","img4.jfif","img5.jfif"]
      i = 0
      setInterval(imageGenerator,1500)
      function imageGenerator()
      {
        i = (i+1)%5;
        document.getElementById("image").src = pics[i]
      }
    </script>
  </body>
</html>
```

A:



The screenshot shows a web browser window with the address bar displaying 'File | C:/Users/kkmat/OneDrive/Desktop/labcycle-2/4a.html'. The page content includes the following text and interactive elements:

Name: Kailash Nath  
Regd. No.: Y21CS065  
**Enter the size:**  
  
  
  
  
  
  
Before sorting : 43,12,76,34,22  
  
After sorting : 12,22,34,43,76

4.

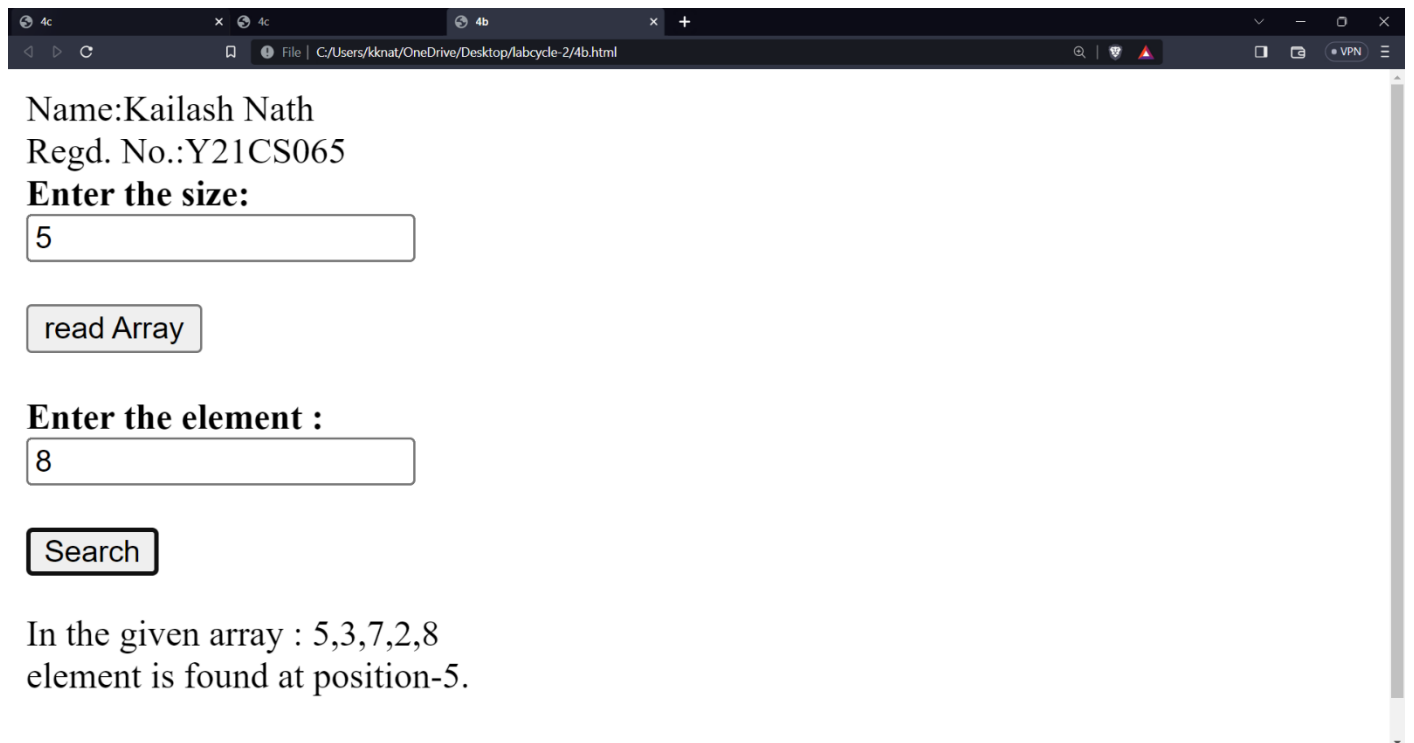
a.Aim: sort the array element using bubble sort technique.

```
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>4a</title>
  </head>
  <body>
    <script>
      let n;
      let a = []
      function bubbleSort()
      {
        let t;
        for(i=0;i<n-1;i++)
        {
          for(j=0;j<n-i-1;j++)
          {
            if(a[j]>a[j+1])
            {
              t = a[j]
              a[j] = a[j+1]
              a[j+1] = t
            }
          }
        }
        document.getElementById("x").innerHTML = "After sorting : \n"+a;
      }
      function readArray()
      {
        n = parseInt(document.getElementById("size").value);
        for(i=0;i<n;i++)
          a[i] = parseInt(prompt("Enter Element - ' + (i+1)"));
        document.getElementById("result").innerHTML = "Before sorting : \n"+a;
      }
    </script>
    <label><b>Enter the size: </b></label><br>
    <input type="text" id = "size"><br><br>
    <button onclick="readArray()">read Array</button><br><br>
    <button onclick="bubbleSort()">sort the elements</button>
    <p id = "result"></p><br>
    <p id = "x"></p><br>
  </body>
</html>
```



Regd. No.: Y21CS065

B:



The screenshot shows a web browser window with the address bar displaying 'File | C:/Users/kkmat/OneDrive/Desktop/labcycle-2/4b.html'. The page content includes the following elements:

- Name: Kailash Nath
- Regd. No.: Y21CS065
- Enter the size:
- read Array (button)
- Enter the element :
- Search (button)
- In the given array : 5,3,7,2,8  
element is found at position-5.

**b.Aim:** search a given element in the given set of given elements using binary search technique.

```
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>4b</title>
  </head>
  <body>
    <script>
      let n;
      let a = []
      function binarySearch()
      {
        let low = 0,high = a.length-1,x = parseInt(document.getElementById("element").value)
        while(low<=high)
        {
          mid = Math.floor((low+high)/2)
          if(x == a[mid])
            break
          else if(x < a[mid])
            high = mid-1
          else
            low = mid+1
        }
        if(low>high)
          document.getElementById("result").innerHTML = "Element not found."
        else
          document.getElementById("result").innerHTML = "element is found at position-"+(mid+1)+". "
      }
      function readArray()
      {
        n = parseInt(document.getElementById("size").value);
        for(i=0;i<n;i++)
          a[i] = parseInt(prompt("Enter Element - ' + (i+1)"));
      }
    </script>
    <label><b>Enter the size: </b></label><br>
    <input type="text" id = "size"><br><br>
    <button onclick="readArray()">read Array</button><br><br>
    <b>Enter the element : </b><br>
    <input type="text" id = "element"><br><br>
    <button onclick="binarySearch()">Search</button>
    <p id = "result"></p><br>
  </body>
</html>
```

C:



Name: Kailash Nath  
Regd. No.: Y21CS065

Matrix-1		Matrix-2	
Enter the no. of rows :	<input type="text" value="3"/>	Enter the no. of rows :	<input type="text" value="3"/>
Enter the no. of columns :	<input type="text" value="3"/>	Enter the no. of columns :	<input type="text" value="3"/>
<div>Read</div> <div>1 2 3 4 5 6 7 8 9</div>		<div>Read</div> <div>5 4 3 2 1 7 8 9 0</div>	
		<div>6 6 6 6 6 13 15 17 9</div>	
		<div>33 33 17 78 75 47 123 117 77</div>	

c.Aim: compute i) addition of two matrices ii) multiplication of two matrices.

```
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>4c-1</title>
  </head>
  <body>
    <style>
      *
      {
        text-align: center;
      }
    </style>
    <script>
      let A = [],B = []
      function read(X,d)
      {
        X.length = 0
        m = parseInt(document.getElementById('r'+d).value);
        n = parseInt(document.getElementById('c'+d).value);
        for(i=0;i<m;i++)
        {
          X[i] = []
          for(j=0;j<n;j++)
          {
            X[i][j] = parseInt(prompt('Enter Element'));
          }
        }
      }
      function display(X,d)
      {
        x = ""
        for(i=0;i<X.length;i++)
        {
          for(j=0;j<X[i].length;j++)
          {
            x += X[i][j].toString()+" "
          }
          x+="<br>"
        }
        document.getElementById("display"+d).innerHTML = x
      }
      function addition()
      {
        if(A.length == B.length && A[0].length == B[0].length)
        {
          x = ""
          for(i=0;i<A.length;i++)
          {
```



```

        for(j=0;j<A[i].length;j++)
        {
            x += (A[i][j]+B[i][j]).toString()+" "
        }
        x+="<br>"
    }
    document.getElementById("addition").innerHTML = x
}
else
    document.getElementById("addition").innerHTML = "Addition is not possible."
}
function multiplication()
{
    if(A[0].length == B.length)
    {
        x = ""
        for(i=0;i<A.length;i++)
        {
            for(j=0;j<B[0].length;j++)
            {
                s=0;
                for(k=0;k<B.length;k++)
                {
                    s=s+A[i][k]*B[k][j];
                }
                x += (s).toString()+" "
            }
            x+="<br>"
        }
        document.getElementById("multiplication").innerHTML = x
    }
    else
        document.getElementById("multiplication").innerHTML = "Multiplication is not possible."
}
</script>
<table border="1" width="100%" height="50%">
    <tr>
        <th colspan="2">Matrix-1</th>
        <th colspan="2">Matrix-2</th>
    </tr>
    <tr>
        <th>Enter the no. of rows : </th>
        <td><input type="text" id="r1"></td>
        <th>Enter the no. of rows : </th>
        <td><input type="text" id="r2"></td>
    </tr>
    <tr>
        <th>Enter the no. of columns : </th>
        <td><input type="text" id="c1"></td>
    </tr>

```

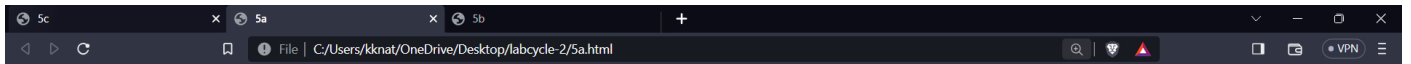


```
<th>Enter the no. of columns : </th>
<td><input type="text" id="c2"> </td>
</tr>
<tr>
  <td colspan="2">
    <button onclick = "read(A,'1')">Read</button> <br>
    <button id = "display1" onclick = "display(A,'1')">Display</button>
  </td>
  <td colspan="2">
    <button onclick = "read(B,'2')">Read</button> <br>
    <button id = "display2" onclick = "display(B,'2')">Display</button>
  </td>
</tr>
<tr>
  <td colspan="4">
    <button id="addition" onclick="addition()">Addition</button> <br>
  </td>
</tr>
<tr>
  <td colspan="4">
    <button id="multiplication" onclick="multiplication()">Multiplication</button> <br>
  </td>
</tr>
</table>
</body>
</html>
```



Regd. No.: Y21CS065

A:



Name:Kailash Nath  
Regd. No.:Y21CS065

charAt(0) : K

concatination : Kailash NathHermit

endsWith : true

indexOf : -1

lastIndexOf : -1

length : 18

replace : Kailash NathLync

slice : Ka

split : K

toUpperCase : KAILASH NATHHERMIT

**5.**

**a.Aim:** implement string operations using String object.

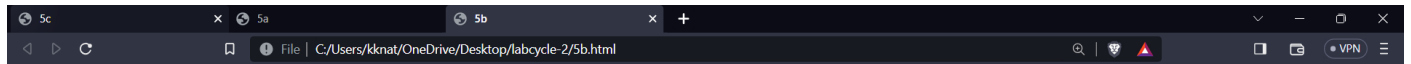
```
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>5a</title>
  </head>
  <body>
    <p id="1"></p>
    <p id="2"></p>
    <p id="3"></p>
    <p id="4"></p>
    <p id="5"></p>
    <p id="6"></p>
    <p id="7"></p>
    <p id="8"></p>
    <p id="9"></p>
    <p id="0"></p>
    <script>
      let s1="Kailash Nath";
      let s2="Hermit";
      let l1 = s1.charAt(0);
      let l2 = s1.concat(s2);
      let l3 = l2.endsWith("it");
      let l4 = l1.indexOf("Nath");
      let l5 = l1.lastIndexOf("Nath");
      let l=l2.length;
      let l6 = l2.replace("Hermit", "Lync");
      let l7 = l2.slice(0, 2);
      const my = l1.split(" ");
      let l8 = l2.toUpperCase();
      document.getElementById("1").innerHTML = "charAt(0) : "+ l1;
      document.getElementById("2").innerHTML = "concatination : "+l2;
      document.getElementById("3").innerHTML = ("endsWith : ")+l3;
      document.getElementById("4").innerHTML = ("indexOf : ")+l4;
      document.getElementById("5").innerHTML = ("lastIndexOf : ")+l5;
      document.getElementById("6").innerHTML = ("length : ")+l;
      document.getElementById("7").innerHTML = ("replace : ")+l6;
      document.getElementById("8").innerHTML = ("slice : ")+l7;
      document.getElementById("9").innerHTML = ("split : ")+my;
      document.getElementById("0").innerHTML = ("toUpperCase : ")+l8;
    </script>
  </body>
</html>
```

**b.Aim:** implement the mathematical operations using Math object.

```
<html>
  <head>
```

Regd. No.: Y21CS065

**B:**



Name:Kailash Nath  
Regd. No.:Y21CS065

absolute : 7.2523

arc cosine : NaN

arc sine : 1.5707963267948966

exponential : 403.4287934927351

logerithemic : 1.0986122886681096

square root : 12

round : -3

sign : -1

random : 30.485970789530036

truncate : 10

```
Name:Kailash Nath<br>
Regd. No.:Y21CS065<br>
<title>5b</title>
</head>
<body>
  <p id="1"></p>
  <p id="2"></p>
  <p id="3"></p>
  <p id="4"></p>
  <p id="5"></p>
  <p id="6"></p>
  <p id="7"></p>
  <p id="8"></p>
  <p id="9"></p>
  <p id="0"></p>
  <script>
    let m1=23;
    let m2=-657;
    let l1 = Math.abs(-7.2523);
    let l2 = Math.acosh(0.5);
    let l3 = Math.asin(1);
    let l4 = Math.exp(6);
    let l5 = Math.log(3);
    let l=Math.sqrt(144);
    let l6 = Math.round(-2.56);
    let l7 = Math.sign(-689);
    const my = Math.random() * 100;
    let l8 = Math.trunc(10.256);
    document.getElementById("1").innerHTML = ("absolute :")+l1;
    document.getElementById("2").innerHTML = ("arc cosine :")+l2;
    document.getElementById("3").innerHTML = ("arc sine :")+l3;
    document.getElementById("4").innerHTML = ("exponential :")+l4;
    document.getElementById("5").innerHTML = ("logerithemic :")+l5;
    document.getElementById("6").innerHTML = ("square root :")+l;
    document.getElementById("7").innerHTML = ("round :")+l6;
    document.getElementById("8").innerHTML = ("sign :")+l7;
    document.getElementById("9").innerHTML = ("random :")+my;
    document.getElementById("0").innerHTML = ("truncate :")+l8;
  </script>
</body>
</html>
```

Regd. No.: Y21CS065

C:



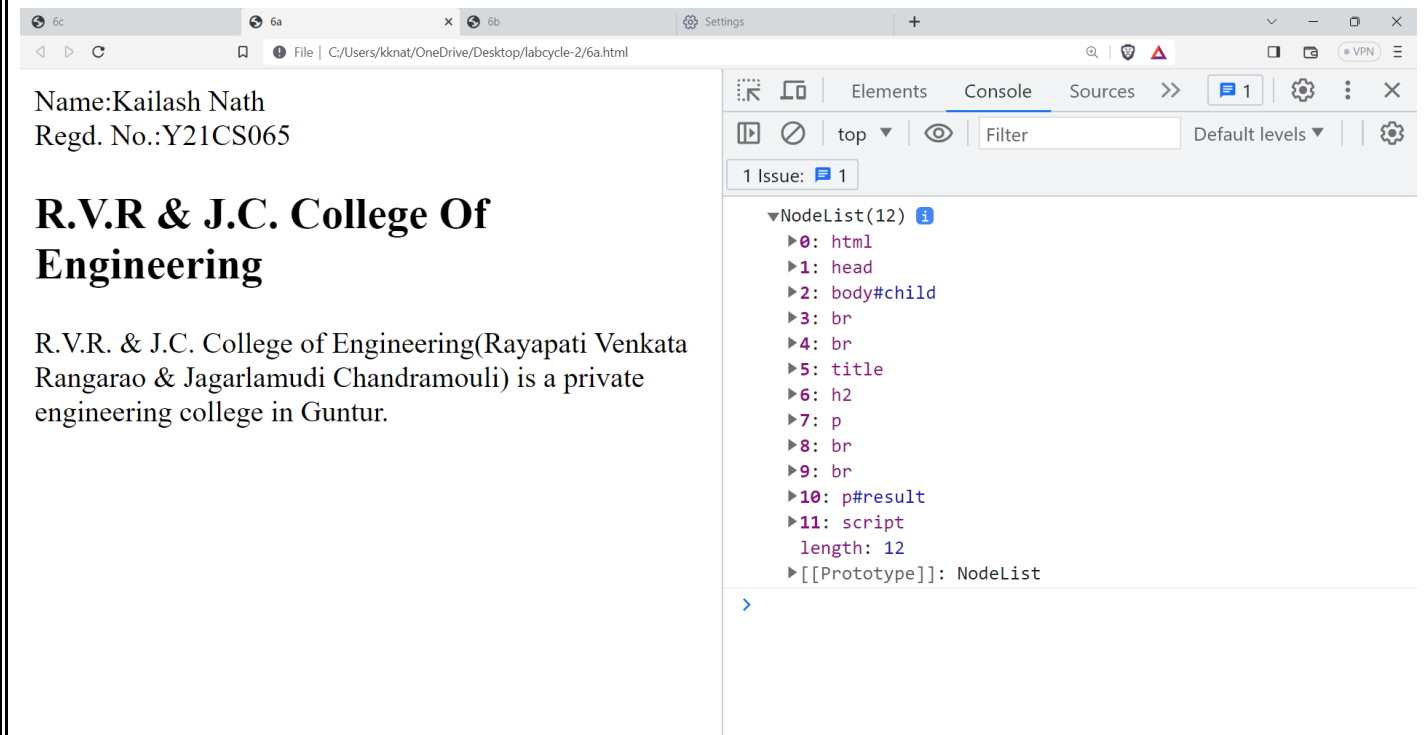
Name:Kailash Nath  
Regd. No.:Y21CS065

# Good Evening

c.Aim: display Greeting messages using Date object.

```
<!DOCTYPE html>
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>5c</title>
  </head>
  <body>
    <b><p id="r" style="text-align: center;font-size: 40px"></p></b>
    <script>
      var greet = ['Good Night','Good Morning','Good Afternoon','Good Evening']
      const d = new Date();
      var i=parseInt(d.getHours() / 24 * 4)
      document.getElementById("r").innerHTML =greet[i];
    </script>
  </body>
</html>
```

A:



The screenshot shows a web browser window with a document titled '6a' and a file path 'C:/Users/kknat/OneDrive/Desktop/labcycle-2/6a.html'. The document content is as follows:

Name:Kailash Nath  
Regd. No.:Y21CS065

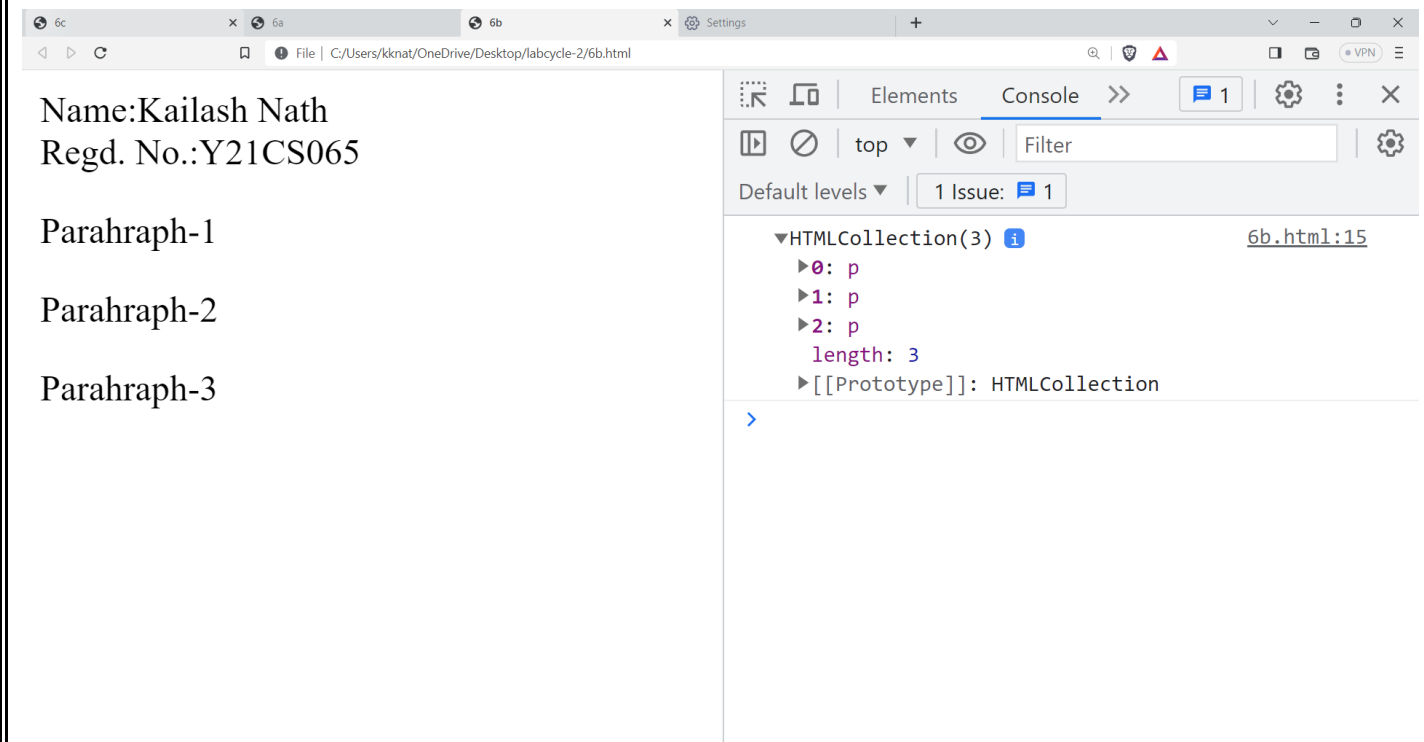
## R.V.R & J.C. College Of Engineering

R.V.R. & J.C. College of Engineering(Rayapati Venkata Rangarao & Jagarlamudi Chandramouli) is a private engineering college in Guntur.

The browser's developer tools are open to the 'Console' tab, showing a single log entry: '▼NodeList(12)'. The log details the DOM structure:

- ▶0: html
- ▶1: head
- ▶2: body#child
- ▶3: br
- ▶4: br
- ▶5: title
- ▶6: h2
- ▶7: p
- ▶8: br
- ▶9: br
- ▶10: p#result
- ▶11: script
- length: 12
- ▶[[Prototype]]: NodeList

B:



The screenshot shows a web browser window with a document titled '6b' and a file path 'C:/Users/kknat/OneDrive/Desktop/labcycle-2/6b.html'. The document content is as follows:

Name:Kailash Nath  
Regd. No.:Y21CS065

Parahraph-1

Parahraph-2

Parahraph-3

The browser's developer tools are open to the 'Console' tab, showing a single log entry: '▼HTMLCollection(3)'. The log details the DOM structure:

- ▶0: p
- ▶1: p
- ▶2: p
- length: 3
- ▶[[Prototype]]: HTMLCollection

The log entry is associated with the file '6b.html' at line 15.

**6. demonstrate collect objects**

**a.Aim: All collection.**

```
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>6a</title>
  </head>
  <body id="child">
    <h2>
      R.V.R & J.C. College Of Engineering
    </h2>
    <p>
      R.V.R. & J.C. College of Engineering(Rayapati Venkata Rangarao & Jagarlamudi Chandramouli)
      is a private engineering college in Guntur.
    </p><br><br>
    <p id="result"></p>
    <script>
      const all_collection = document.querySelectorAll("*");
      console.log(all_collection);
    </script>
  </body>
</html>
```

**b.Aim: Children collection.**

```
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>6b</title>
  </head>
  <body>
    <div id="ch">
      <p>Parahraph-1</p>
      <p>Parahraph-2</p>
      <p>Parahraph-3</p>
    </div>
    <script>
      const child_collection = document.getElementById("ch").children;
      console.log(child_collection);
    </script>
  </body>
</html>
```



Regd. No.: Y21CS065

C:

The screenshot shows a web browser window with the address bar displaying the file path `C:/Users/kknat/OneDrive/Desktop/labcycle-2/6c.html`. The page content includes the text "Name:Kailash Nath", "Regd. No.:Y21CS065", and three blue underlined links: [Link 1](#), [Link 2](#), and [Link 3](#). The browser's developer console is open, showing a log entry for an `HTMLCollection(3)` at `6c.html:13`. The collection contains three elements, all labeled `a`, and has a `length` of 3. The console interface includes tabs for Elements and Console, a filter input, and a "1 Issue" indicator.

Name:Kailash Nath  
Regd. No.:Y21CS065  
[Link 1](#) [Link 2](#) [Link 3](#)

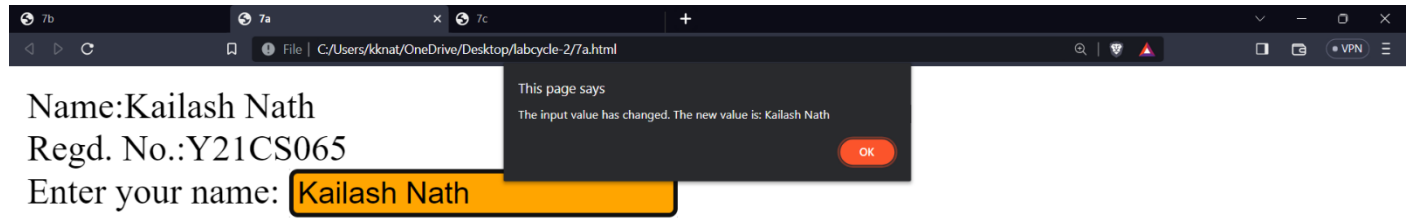
▼HTMLCollection(3) `6c.html:13`  
▶0: a  
▶1: a  
▶2: a  
length: 3  
▶[[Prototype]]: HTMLCollection

**c.Aim:** Anchor collection.

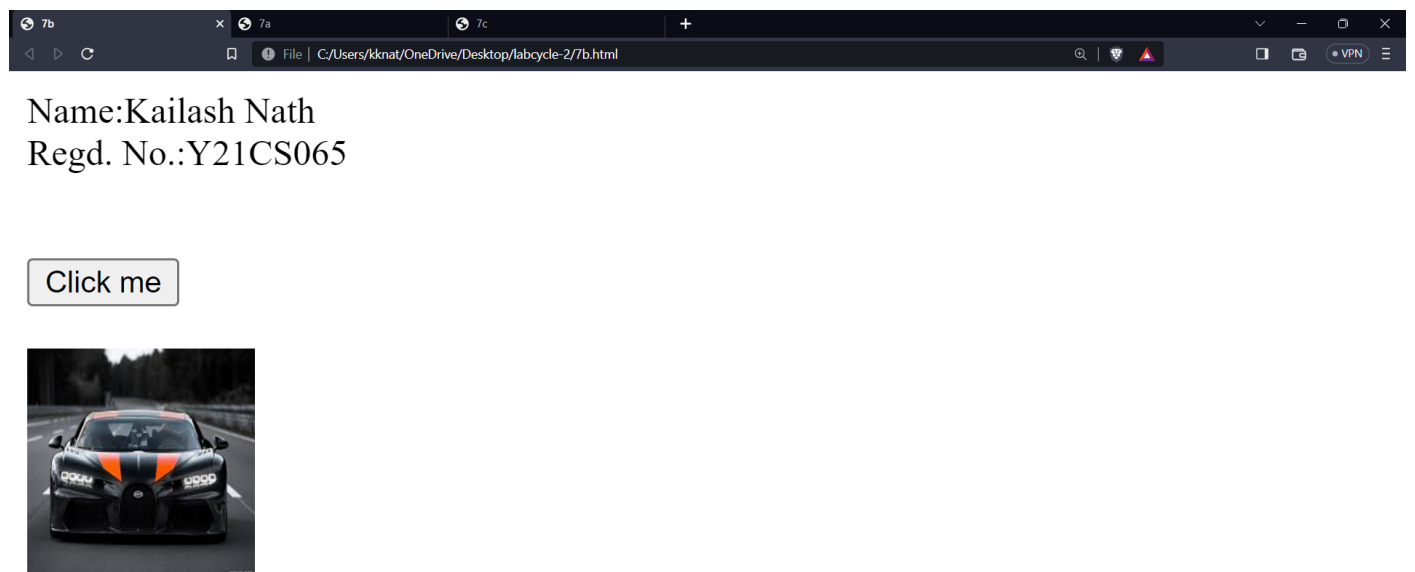
```
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>6c</title>
  </head>
  <body id="child">
    <a href="#">Link 1</a>
    <a href="#">Link 2</a>
    <a href="#">Link 3</a>
    <script>
      const anchor_collection = document.getElementsByTagName("a");
      console.log(anchor_collection);
    </script>
  </body>
</html>
```

Regd. No.: Y21CS065

A:



B:



## 7. demonstrate collect objects

### a.Aim: All collection.

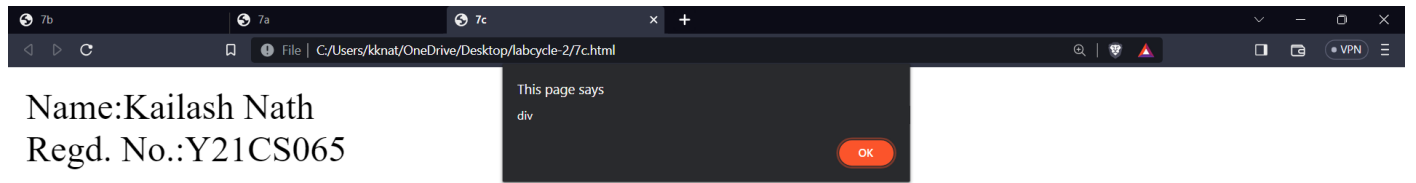
```
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>6a</title>
  </head>
  <body>
    <form action="">
      <input type="text" name="" id="textbox" onfocus="focused(this)" onblur="blurred(this)">
      <select name="" id="city" onchange="changed()">
        <option>Select</option>
        <option>Guntur</option>
        <option>Vijayawada</option>
        <option>Vizag</option>
      </select>
    </form>
  </body>
<script>
  function changed(){
    alert("Option changed")
  }
  function focused(box){
    box.style.background = "magenta";
    box.style.color = "yellow";
  }
  function blurred(box){
    box.value = box.value.toUpperCase();
  }
</script>
</html>
```

### b.Aim: Mouse events (onclick, onmousedown,onmouseup,onmousemove,onmouseover)

```
<!DOCTYPE html>
<html>
  <head>
    Name:Kailash Nath<br>
    Regd. No.:Y21CS065<br>
    <title>7b</title>
  </head>
  <body>
    <br><br><button onclick="myFunction()">Click me</button><br><br>
    <img id="p2" src="" onmousemove="bigImg(this)" onmouseout="normalImg(this)" border="0"
width="64" height="64">
    <p id="demo"></p>
    <p id="p1" onmousedown="mouseDown()" onmouseup="mouseUp()">BUGATTI CAR</p>
    <script>
      function myFunction() {
        document.getElementById("p2").src = "img4.jfif";
      }
    </script>
  </body>
</html>
```

Regd. No.: Y21CS065

C:



FORM

DIV

P

```
    }  
    function mouseDown() {  
        document.getElementById("p1").style.color = "red";  
    }  
    function mouseUp() {  
        document.getElementById("p1").style.color = "green";  
    }  
    function bigImg(x) {  
        x.style.height = "100px";  
        x.style.width = "100px";  
    }  
    function normalImg(x) {  
        x.style.height = "50px";  
        x.style.width = "50px";  
    }  
</script>  
</body>  
</html>
```

**c.Aim: Event bubbling.**

```
<!doctype html>  
<html>  
  <head>  
    Name:Kailash Nath<br>  
    Regd. No.:Y21CS065<br>  
    <title>7c</title>  
  </head>  
  <body>  
    <style>  
      body * {  
        margin: 10px;  
        border: 1px solid blue;  
      }  
    </style>  
    <form onclick="alert('form')">FORM  
      <div onclick="alert('div')">DIV  
        <p onclick="alert('p')">P</p>  
      </div>  
    </form>  
  </body>  
</html>  
</body>  
</html>
```