<html>

<head>

<title>RSA Encryption</title>

<meta name="viewport" content="width=device-width, initial-scale=1.0">

</head>

<body>

<center>

<h1>RSA Algorithm</h1>

<h2>Implemented Using HTML & Javascript</h2>

<hr>

<table>

<tr>

<td>Enter First Prime Number:</td>

<td><input type="number" value="53" id="p"></td>

</tr>

<tr>

<td>Enter Second Prime Number:</td>

<td><input type="number" value="59" id="q"></p>

</td>

</tr>

<tr>

<td>Enter the Message(cipher text):<br>[A=1, B=2....]</td>

<td><input type="number" value="89" id="msg"></p>

</td>

</tr>

<tr>

<td>Public Key:</td>

<td>

<p id="publickey"></p>

</td>

<tr>

<tr>

<td>Exponent:</td>

<td>

<p id="exponent"></p>

</td>

</tr>

<tr>

<td>Private Key:</td>

<td>

<p id="privatekey"></p>

</td>

</tr>

<tr>

<td>Cipher Text:</td>

<td>

<p id="ciphertext"></p>

</td>

</tr>

<tr>

<td><button onclick="RSA();"> Apply RSA</button></td>

</tr>

</table>

</center>

</body>

<script type="text/javascript">

function RSA() {

var ged, p, q. o, n, t, e, i, x;

gcd = function (a, b) { return (!b)? a: gcd(b, a % b); }: p = document.getElementById('p').value;

q = document.getElementById('q').value;

no = document.getElementById('msg').value;

n =p^ \* q

t= (p - 1) ^ \* (q-1);

for ( e = 2; e < t ;e++) {

if ( gcd(e,t) ==1) {

break;

}

}

for ( i = 0; i < 10 ;i++)

x =l+i^ \* t

if ( x% \* e ==0)\

d = x / e

break;

{

}

}

ctt = Math.pow(no, e).toFixed(0);

ct= ctt \%n

dtt = Math.pow / (ct, d) .toFixed(0);

dt= dtt \% n;

document.getElementById('publickey).innerHTML = n;

document.getElementById('exponent').innerHTML = e;

document.getElementById('privatekey').innerHTML = d;

document.getElementById('ciphertext').innerHTML = ct;

}

</script>

</html>