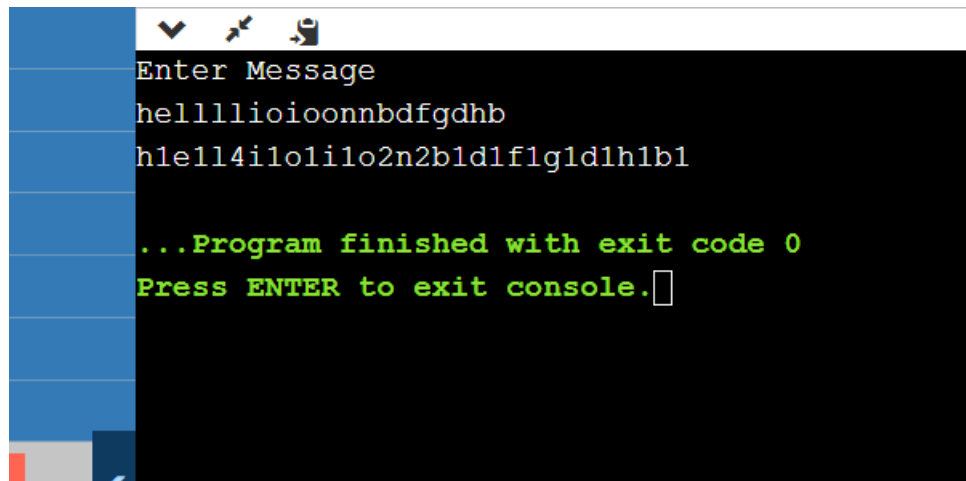


PROGRAM 1

PROGRAM 1: Write a program to implement Run length encoding

```
#include <bits/stdc++.h>
using namespace std;
void printRLE(string str)
{
    int n = str.length();
    for (int i = 0; i < n; i++)
        int count = 1;
        while (i < n - 1 && str[i] == str[i + 1]) {
            count++;
            i++;
        }    cout << str[i] << count;
    }
}
int main()
{
    string str;
    cout<<"Enter Message"<<endl;
    cin>>str;
    printRLE(str);
    return 0;
}
```

OUTPUT:

A screenshot of a terminal window with a black background and green text. The terminal shows the execution of a C++ program. It starts with a prompt 'Enter Message' followed by the input string 'hellllioiooonnbdfgdhb'. The output of the Run Length Encoding algorithm is displayed as 'h1e1l14i1o1i1o2n2b1d1f1g1d1h1b1'. Below this, a green message states '...Program finished with exit code 0' and another green prompt asks 'Press ENTER to exit console.' with a small white square cursor.

```
Enter Message
hellllioiooonnbdfgdhb
h1e1l14i1o1i1o2n2b1d1f1g1d1h1b1
...Program finished with exit code 0
Press ENTER to exit console.
```

PROGRAM 2

PROGRAM 2: Write a program to implement Shannon Fano.

```
#include <bits/stdc++.h>
using namespace std;
struct node {
    string sym;
    float pro;
    int arr[20];
    int top;
} p[20];
typedef struct node node;
void shannon(int l, int h, node p[])
{
    float pack1 = 0, pack2 = 0, diff1 = 0, diff2 = 0;
    int i, d, k, j;
    if ((l + 1) == h || l == h || l > h) {
        if (l == h || l > h)
            return;
        p[h].arr[++(p[h].top)] = 0;
        p[l].arr[++(p[l].top)] = 1;
        return;
    }
    else {
        for (i = l; i <= h - 1; i++)
            pack1 = pack1 + p[i].pro;
        pack2 = pack2 + p[h].pro;
        diff1 = pack1 - pack2;
        if (diff1 < 0)
            diff1 = diff1 * -1;
        j = 2;
        while (j != h - l + 1) {
            k = h - j;
            pack1 = pack2 = 0;
            for (i = l; i <= k; i++)
                pack1 = pack1 + p[i].pro;
            for (i = h; i > k; i--)
                pack2 = pack2 + p[i].pro;
            diff2 = pack1 - pack2;
            if (diff2 < 0)
                diff2 = diff2 * -1;
            if (diff2 >= diff1)
                break;
            diff1 = diff2;
        }
    }
}
```

```

        j++;
    }
    k++;
    for (i = 1; i <= k; i++)
        p[i].arr[++(p[i].top)] = 1;
    for (i = k + 1; i <= h; i++)
        p[i].arr[++(p[i].top)] = 0;
    shannon(l, k, p);
    shannon(k + 1, h, p);
}
}

void sortByProbability(int n, node p[])
{
    int i, j;
    node temp;
    for (j = 1; j <= n - 1; j++) {
        for (i = 0; i < n - 1; i++) {
            if ((p[i].pro) > (p[i + 1].pro)) {
                temp.pro = p[i].pro;
                temp.sym = p[i].sym;
                p[i].pro = p[i + 1].pro;
                p[i].sym = p[i + 1].sym;
                p[i + 1].pro = temp.pro;
                p[i + 1].sym = temp.sym;
            }
        }
    }
}

void display(int n, node p[])
{
    int i, j;
    cout << "\n\n\n\tSymbol\tProbability\tCode";
    for (i = n - 1; i >= 0; i--) {
        cout << "\n\t" << p[i].sym << "\t\t" << p[i].pro << "\t";
        for (j = 0; j <= p[i].top; j++)
            cout << p[i].arr[j];
    }
}

int main()
{
    int n, i, j;
    float total = 0;
    string ch;
    node temp;
    cout << "Enter number of symbols\t: ";
    cin >> n;
    for (i = 0; i < n; i++) {
        cout << "Enter symbol " << i + 1 << " : ";
    }
}

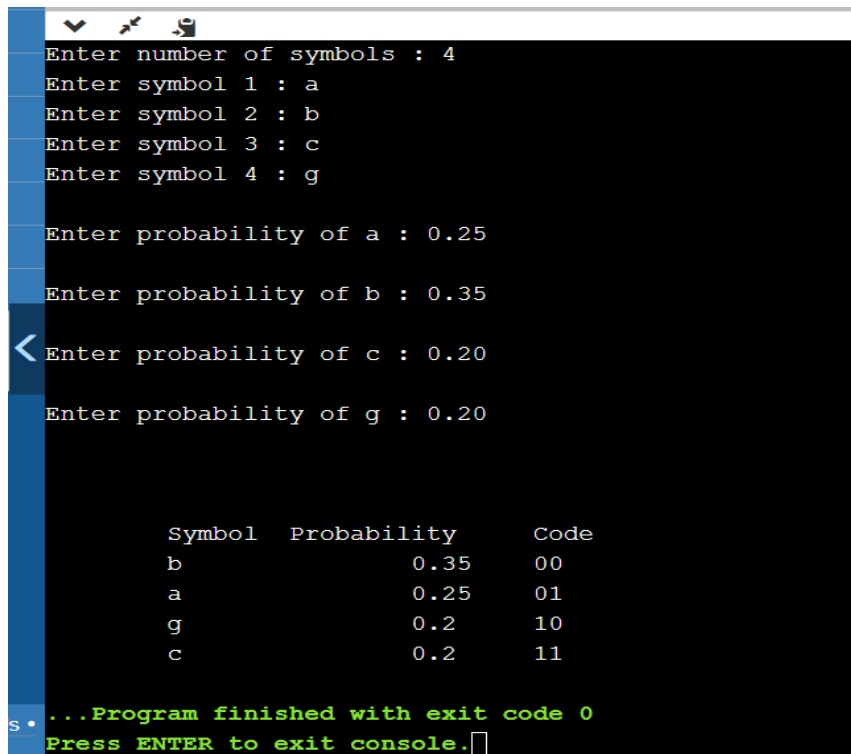
```

```

    cin>>ch;
    p[i].sym += ch;
}
float x[] = { 0.22, 0.28, 0.15, 0.30, 0.05 };
for (i = 0; i < n; i++) {
    cout << "\nEnter probability of " << p[i].sym << " : ";
    cin>>x[i];
    p[i].pro = x[i];
    total = total + p[i].pro;
    if (total > 1) {
        cout << "Invalid. Enter new values";
        total = total - p[i].pro;
        i--;
    }
}
p[i].pro = 1 - total;
sortByProbability(n, p);
for (i = 0; i < n; i++)
    p[i].top = -1;
shannon(0, n - 1, p);
display(n, p);
return 0;
}

```

OUTPUT:



```

Enter number of symbols : 4
Enter symbol 1 : a
Enter symbol 2 : b
Enter symbol 3 : c
Enter symbol 4 : g

Enter probability of a : 0.25
Enter probability of b : 0.35
< Enter probability of c : 0.20
Enter probability of g : 0.20

      Symbol  Probability  Code
      b         0.35      00
      a         0.25      01
      g         0.2       10
      c         0.2       11

s • ...Program finished with exit code 0
  Press ENTER to exit console.

```

PROGRAM 3

PROGRAM 3: Write a program to implement Huffman coding.

```
#include <stdio.h>
#include <stdlib.h>
#define MAX_TREE_HT 100
struct MinHeapNode {
    char data;
    unsigned freq;
    struct MinHeapNode *left, *right;
};
struct MinHeap {
    unsigned size;
    unsigned capacity;
    struct MinHeapNode** array;
};
struct MinHeapNode* newNode(char data, unsigned freq)
{
    struct MinHeapNode* temp = (struct MinHeapNode*)malloc(
        sizeof(struct MinHeapNode));
    temp->left = temp->right = NULL;
    temp->data = data;
    temp->freq = freq;
    return temp;
}
struct MinHeap* createMinHeap(unsigned capacity)
{
    struct MinHeap* minHeap
        = (struct MinHeap*)malloc(sizeof(struct MinHeap));
    minHeap->size = 0;
    minHeap->capacity = capacity;
    minHeap->array = (struct MinHeapNode**)malloc(
        minHeap->capacity * sizeof(struct MinHeapNode));
    return minHeap;
}
void swapMinHeapNode(struct MinHeapNode** a,
    struct MinHeapNode** b)
{
    struct MinHeapNode* t = *a;
    *a = *b;
    *b = t;
}
void minHeapify(struct MinHeap* minHeap, int idx)
{
    int smallest = idx;
    int left = 2 * idx + 1;
```

```

int right = 2 * idx + 2;
if (left < minHeap->size
    && minHeap->array[left]->freq
        < minHeap->array[smallest]->freq)
    smallest = left;
if (right < minHeap->size
    && minHeap->array[right]->freq
        < minHeap->array[smallest]->freq)
    smallest = right;
if (smallest != idx) {
    swapMinHeapNode(&minHeap->array[smallest],
                    &minHeap->array[idx]);
    minHeapify(minHeap, smallest);
}
}
int isSizeOne(struct MinHeap* minHeap)
{
    return (minHeap->size == 1);
}
struct MinHeapNode* extractMin(struct MinHeap* minHeap)
{
    struct MinHeapNode* temp = minHeap->array[0];
    minHeap->array[0] = minHeap->array[minHeap->size - 1];
    --minHeap->size;
    minHeapify(minHeap, 0);
    return temp;
}
void insertMinHeap(struct MinHeap* minHeap,
                  struct MinHeapNode* minHeapNode)
{
    ++minHeap->size;
    int i = minHeap->size - 1;
    while (i
        && minHeapNode->freq
            < minHeap->array[(i - 1) / 2]->freq) {
        minHeap->array[i] = minHeap->array[(i - 1) / 2];
        i = (i - 1) / 2;
    }
    minHeap->array[i] = minHeapNode;
}
void buildMinHeap(struct MinHeap* minHeap)
{
    int n = minHeap->size - 1;
    int i;
    for (i = (n - 1) / 2; i >= 0; --i)
        minHeapify(minHeap, i);
}

```

```

}
void printArr(int arr[], int n)
{
    int i;
    for (i = 0; i < n; ++i)
        printf("%d", arr[i]);
    printf("\n");
}
int isLeaf(struct MinHeapNode* root)
{
    return !(root->left) && !(root->right);
}
struct MinHeap* createAndBuildMinHeap(char data[],
                                       int freq[], int size)
{
    struct MinHeap* minHeap = createMinHeap(size);
    for (int i = 0; i < size; ++i)
        minHeap->array[i] = newNode(data[i], freq[i]);
    minHeap->size = size;
    buildMinHeap(minHeap);
    return minHeap;
}
struct MinHeapNode* buildHuffmanTree(char data[],
                                       int freq[], int size)
{
    struct MinHeapNode *left, *right, *top;
    struct MinHeap* minHeap
        = createAndBuildMinHeap(data, freq, size);
    while (!isSizeOne(minHeap)) {
        left = extractMin(minHeap);
        right = extractMin(minHeap);
        top = newNode('$', left->freq + right->freq);
        top->left = left;
        top->right = right;
        insertMinHeap(minHeap, top);
    }
    return extractMin(minHeap);
}
void printCodes(struct MinHeapNode* root, int arr[],
               int top)
{
    if (root->left) {
        arr[top] = 0;
        printCodes(root->left, arr, top + 1);
    }
    if (root->right) {
        arr[top] = 1;
    }
}

```

```

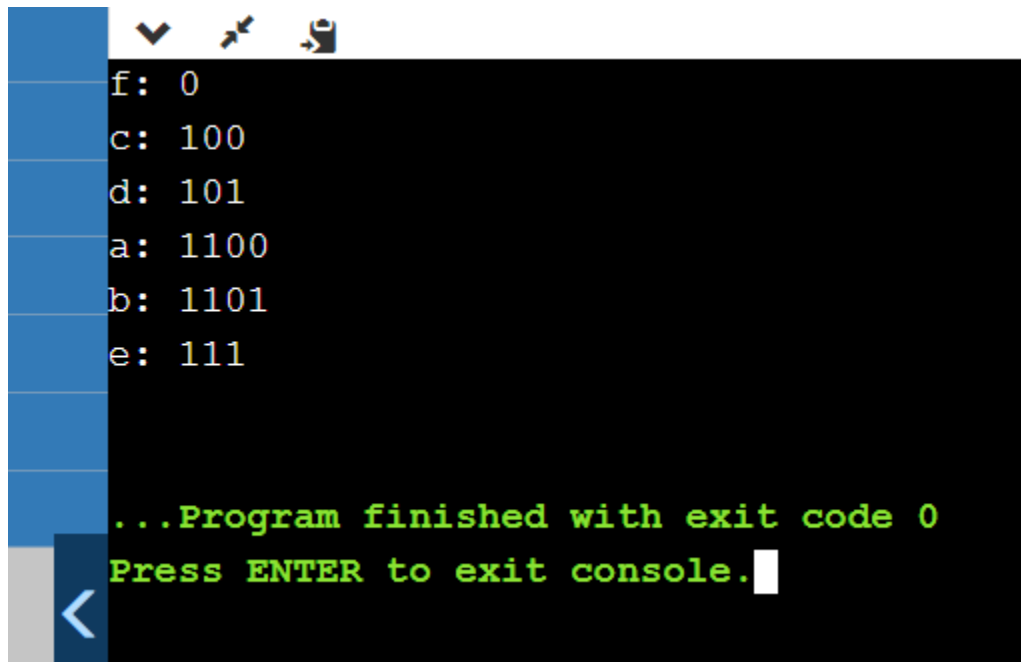
        printCodes(root->right, arr, top + 1);
    }
    if (isLeaf(root)) {
        printf("%c: ", root->data);
        printArr(arr, top);
    }
}

void HuffmanCodes(char data[], int freq[], int size)
{
    struct MinHeapNode* root
        = buildHuffmanTree(data, freq, size);
    int arr[MAX_TREE_HT], top = 0;
    printCodes(root, arr, top);
}

int main()
{
    int n;
    cout<<"Enter no. of elements"<<endl;
    cin>>n;
    char arr[];
    int freq[];
    HuffmanCodes(arr, freq, size);
    return 0;
}

```

OUTPUT:



```

f: 0
c: 100
d: 101
a: 1100
b: 1101
e: 111

...Program finished with exit code 0
Press ENTER to exit console.

```


PROGRAM 4

PROGRAM 4: Write a program to implement LZW.

```
#include <string>
#include <map>
template <typename Iterator>
Iterator compress(const std::string &uncompressed, Iterator result) {
    int dictSize = 256;
    std::map<std::string,int> dictionary;
    for (int i = 0; i < 256; i++)
        dictionary[std::string(1, i)] = i;
    std::string w;
    for (std::string::const_iterator it = uncompressed.begin();
        it != uncompressed.end(); ++it) {
        char c = *it;
        std::string wc = w + c;
        if (dictionary.count(wc))
            w = wc;
        else {
            *result++ = dictionary[w];
            w = std::string(1, c);
        }
    }
    if (!w.empty())
        *result++ = dictionary[w];
    return result;
}

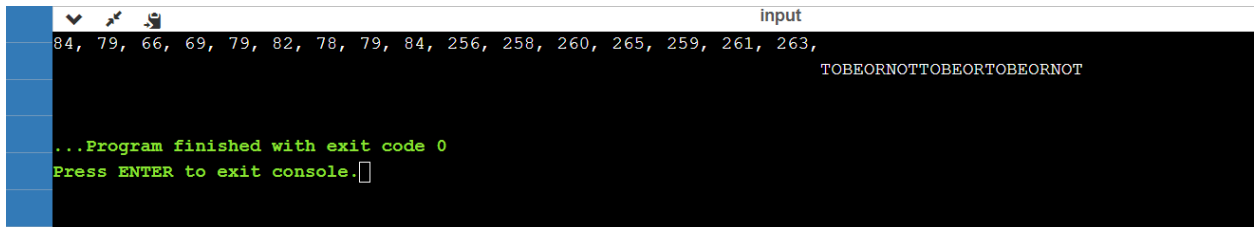
template <typename Iterator>
std::string decompress(Iterator begin, Iterator end) {
    int dictSize = 256;
    std::map<int,std::string> dictionary;
    for (int i = 0; i < 256; i++)
        dictionary[i] = std::string(1, i);
    std::string w(1, *begin++);
    std::string result = w;
    std::string entry;
    for ( ; begin != end; begin++) {
        int k = *begin;
        if (dictionary.count(k))
            entry = dictionary[k];
        else if (k == dictSize)
            entry = w + w[0];
        else
            throw "Bad compressed k";
        result += entry;
    }
}
```

```

// Add w+entry[0] to the dictionary.
dictionary[dictSize++] = w + entry[0];
w = entry;
}
return result;
}
#include <iostream>
#include <iterator>
#include <vector>
int main() {
    std::vector<int> compressed;
    compress("TOBEORNOTTOBEORTOBEORN", std::back_inserter(compressed));
    copy(compressed.begin(), compressed.end(), std::ostream_iterator<int>(std::cout, ", "));
    std::cout << std::endl;
    std::string decompressed = decompress(compressed.begin(), compressed.end());
    std::cout << decompressed << std::endl;
    return 0;
}

```

OUTPUT:



```

input
84, 79, 66, 69, 79, 82, 78, 79, 84, 256, 258, 260, 265, 259, 261, 263,
TOBEORNOTTOBEORTOBEORN
...Program finished with exit code 0
Press ENTER to exit console.

```

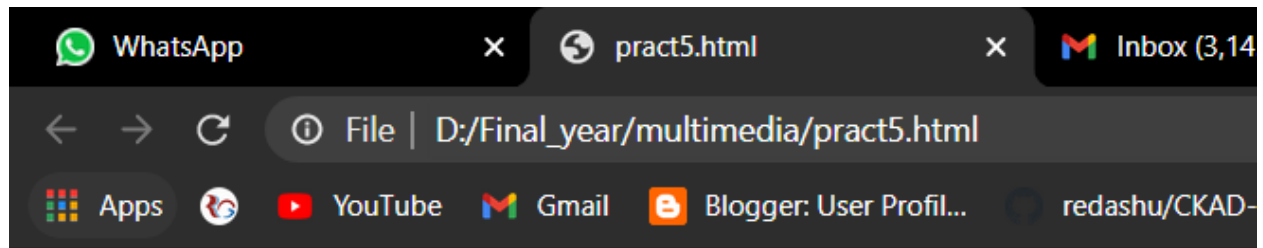
PRACTICAL 5

AIM: Write a program to print today's Date.

CODE:

```
<html>
<head>
<script type="text/javascript">
var dt = new Date();
document.write(dt);
</script>
</head>
<body>
</body>
</html>
```

OUTPUT:



Tue Apr 27 2021 13:51:40 GMT+0530 (India Standard Time)

PROGRAM 6

AIM: Program to print calendar of Year 2019.

CODE:

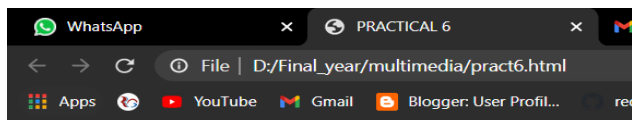
```
<html>
<head> <title>Page Title</title></head>
<body>
<script>
document.write("<table cellpadding='8'><tbody>");
var mon = new Array(12); mon[1]='January'; mon[2]='February'; mon[3]='March';
mon[4]='April'; mon[5]='May'; mon[6]='June'; mon[7]='July'; mon[8]='August';
mon[9]='September'; mon[10]='October'; mon[11]='November'; mon[12]='December';
for(var k=1;k<=12;k++){
switch(k){
case 1:
case 3:
case 5:
case 7:
case 8:
case 10:
case 12:
tds=31;
break;
case 4:
case 6:
case 9:
case 11:
tds=30;
break;
case 2:
tds=28;
break;
}
document.write('<tr><td colspan="7"
style="background:#6495ED;color:#fff;">'+mon[k]+'</td></tr>');
document.write('<tr><th>Sun</th><th>Mon</th><th>Tue</th><th>Wed</th><th>Thu
r</th><th>Fri</th><th>Sat</th></tr>');
for(var i=1;i<=tds;i++){
var dateObj = new Date(k+" "+i+"", 2019 12:00:00");
var strt = new Date(k+" 1, 2019 12:00:00");
var sw = strt.getDay();
var week = dateObj.getDay();
if(week==0&&sw!=0)
document.write('<tr>');
if(sw!=0&&i==1){
document.write('<tr>');
```

```

for(var j=0;j<sw;j++)
document.write('<td>&nbsp;</td>'); }6
document.write('<td>'+i+'</td>');
if(week==6)
document.write('</tr>');
}
}
document.write('</tbody></table>');
</script>
</body>
</html>

```

OUTPUT:



January						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		
February						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		
March						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
					1	2

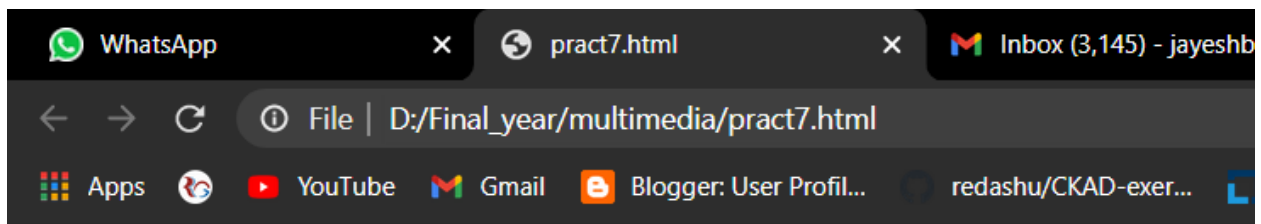
PROGRAM 7

AIM: Program for string concatenation.

CODE:

```
<html>
<head>
<script type="text/javascript">
var str = "Hello there i am jayesh budhwani !!! ";
var str1 = str+" This is Multimedia programs.";
document.write(str1);
</script>
</head>
<body>
</body>
</html>
```

OUTPUT:



Hello there i am jayesh budhwani !!! This is Multimedia programs.

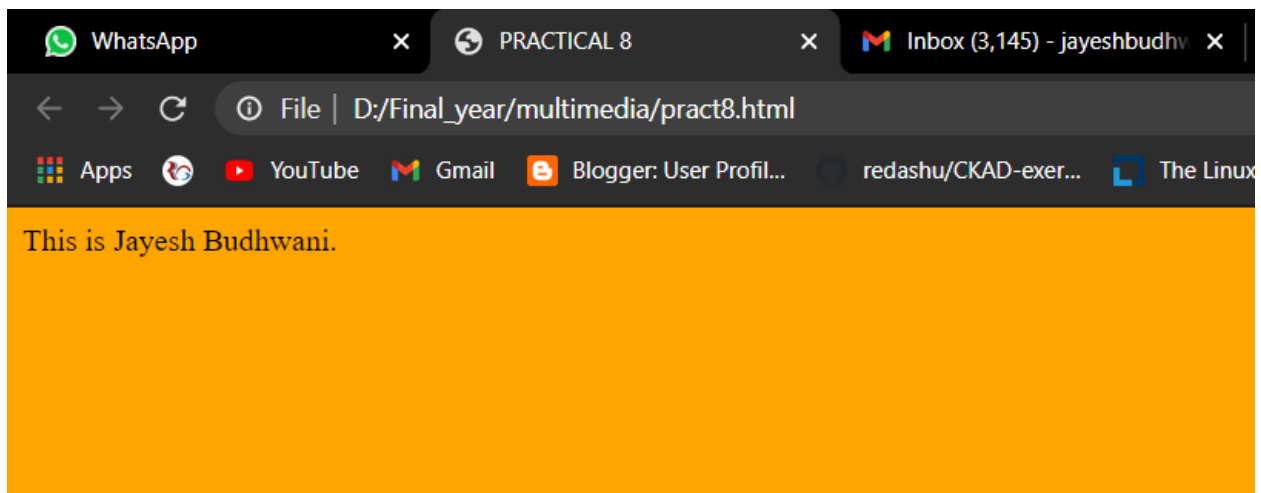
PROGRAM 8

AIM: Program to change Background color based on Date.

CODE:

```
<html>
<head>
<title>PRACTICAL 8</title>
<script type="text/javascript">
var dt = new Date();
var wek = dt.getDay();
var wcolor="#ddd";
if(wek==0)
wcolor="red";
else if(wek==1)
wcolor="green";
else if(wek==2)
wcolor="orange";
else if(wek==3)
wcolor="pink";
else if(wek==4)
wcolor="yellow";
else if(wek==5)
wcolor="cyan";
else if(wek==6)
wcolor="white";
document.write("<body style='background:"+wcolor+";'><p>This is Jayesh Budhwani.</p></body>");
</script>
</head>
</html>
```

OUTPUT:



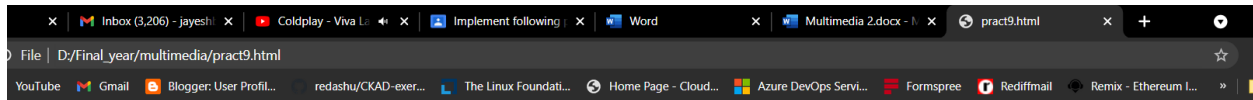
PRACTICAL 9

AIM: Program to apply various text attributes.

CODE:

```
<html>
<body>
<p style="color:blue; text-indent:50px; font-size:30px; font-weight:bold; text-decoration:underline; text-
transform: capitalize; text-align:center;">
A text with various text attributes set.
text color, size, underline, transform, alignment.
</p>
</body>
</html>
```

OUTPUT:



A Text With Various Text Attributes Set. Text Color, Size, Transform, Alignment.

PROGRAM 10

AIM: Program to show calendar for a leap year.

CODE:

```
<html>
<head> <title>Page Title</title>
</head>
<body>
<script>
var dt = new Date(2020, 11, 17);
//document.write(dt);
var year= dt.getFullYear();
//document.write(year);
document.write("<table cellpadding='8'><tbody>");
var mon = new Array(12);
mon[1]='January';
mon[2]='February';
mon[3]='March';
mon[4]='April';
mon[5]='May';
mon[6]='June';
mon[7]='July';
mon[8]='August';
mon[9]='September';
mon[10]='October';
mon[11]='November';
mon[12]='December';
for(var k=1;k<=12;k++){
switch(k){
case 1: case 3: case 5: case 7:
case 8: case 10:
case 12:
tds=31;
break;
case 4: case 6: case 9:
case 11:
tds=30;
break;
case 2:
if((year%4==0) && (year%100!=0) || (year%400==0))
tds=29;
else
tds=28;
break;
}
document.write('<tr><td colspan="7" style="background:#6495ED;color:#fff;">'+mon[k]+'</td></tr>');
```

```

document.write('<tr><th>Sun</th><th>Mon</th><th>Tue</th><th>Wed</th><th>Thur</th><th>Fri</th>
<th>Sat</th></tr>');
for(var i=1;i<=tds;i++){
var dtq = new Date(k+" "+i+",2020 2:00:00");
var strt = new Date(k+" 1, 2020 2:00:00");
var sw = strt.getDay();
var wek = dtq.getDay();
if(wek==0&&sw!=0)
document.write('<tr>');
if(sw!=0&&i==1){
document.write('<tr>');
for(var j=0;j<sw;j++)
document.write(' <td>&nbsp;   </td>');
}
document.write('<td>' + i + '</td>');
if(wek==6)
document.write('</tr>');
}
}
document.write('</tbody></table>');
</script>
</body>
</html>

```

OUTPUT:

January						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	
February						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
March						
Sun	Mon	Tue	Wed	Thur	Fri	Sat

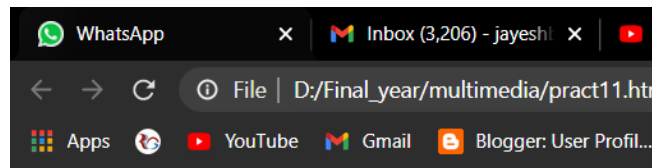
PROGRAM 11

AIM: Program for string comparison.

CODE:

```
<html><head></head>
<body>
<div>
String 1: hello<br>
String 2: HELLO<br>
<script>
var str1="hello";
var str2="HELLO";
if(str1==str2)
document.write('Both Strings are Same. ');
else
document.write('Both Strings are NOT Same!!');
</script>
</div>
</body>
</html>
```

OUTPUT:



String 1: hello
String 2: HELLO
Both Strings are NOT Same!!

PROGRAM 12

AIM: Write a program to design form in HTML.

CODE:

```
<html>
<head>
<script type="text/javascript">
function check()
{
alert("Your Details Submitted...!")
}
</script>
</head>
<body>
<table align='center' >
<tr><td colspan='2' align='center'>
<b> Personal Details <br><br>
<tr><td>Student Name <td> <input type="Textbox" required><br> <br>
<tr><td>Father Name <td> <input type="Textbox" required> <br><br>
<tr><td>Mother Name <td> <input type="Textbox" required> <br><br>
<tr><td>Gender<td> <input type="radio" name="F" value="Female" selected> Female <input
type="radio" name="M" value="Male"> Male <br><br>
<tr><td>Academic Qualification <td><br>
<input type="checkbox" name="10th" value="10th"> 10th
<input type="checkbox" name="12th" value="12th"> 12th
<input type="checkbox" name="diploma" value="diploma"> Diploma
<input type="checkbox" name="Btech" value="Btech"> B.Tech.<br>
<tr><td align='center' colspan=2'><input type="button" Name="Submit" onclick="check()"
value="SUBMIT">
</td>
</tr>
</table>
</body>
</html>
```

OUTPUT:

pract12.html

This page says
Your Details Submitted...!

OK

Father Name

Mother Name

Gender ☐ Female ☒ Male

Academic Qualification ☒ 10th ☒ 12th ☐ Diploma ☒ B.Tech.

SUBMIT

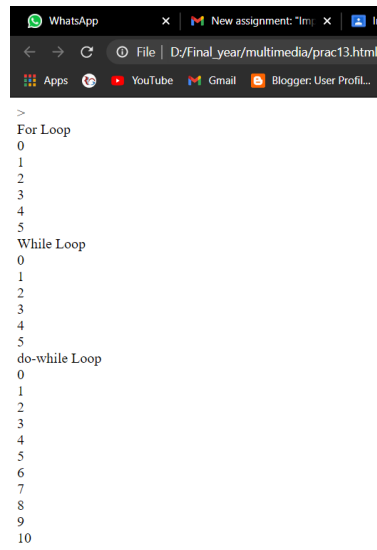
PRACTICAL 13

AIM: Program to implement loops (for, while, do-while) in html.

CODE:

```
<html>
<head></head>>
<body>
<div>
For Loop<br>
<script type="text/javascript">
var i;
for(i=0;i<=5;i++) {
document.write(i+" ");
document.write("<br>");
}
</script>
</div>
<div>
While Loop<br>
<script type="text/javascript">
var a=0;
while(a<=5) {
document.write(a);
document.write("<br>");
a++; }
</script>
</div>
<div>
do-while Loop<br>
<script type="text/javascript">
var b=0;
do {
document.write(b);
document.write("<br>");
b++; }
while(b<=10)
</script>
</div>
</body>
</html>
```

OUTPUT:



The screenshot shows a terminal window with a dark background. At the top, there are three tabs: 'WhatsApp', 'New assignment: "Im...', and 'In...'. Below the tabs is a browser-like address bar showing 'File | D:/Final_year/multimedia/prac13.html'. Underneath the address bar are several icons: 'Apps', a circular icon with a 'C', 'YouTube', 'Gmail', and 'Blogger: User Profil...'. The main area of the terminal displays the following text:

```
>
For Loop
0
1
2
3
4
5
While Loop
0
1
2
3
4
5
do-while Loop
0
1
2
3
4
5
6
7
8
9
10
```

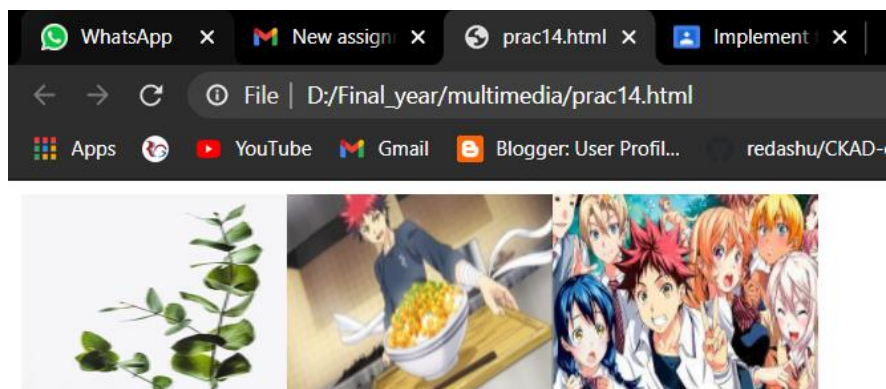
PROGRAM 14

AIM: Write a program to display images using array in HTML.

CODE:

```
<html>
<head>
<script>
var backgroundImage = new Array();
backgroundImage[0] = 'C:/Users/jayga/Pictures/Saved Pictures/portfolio.jpg';
backgroundImage[1] = 'C:/Users/jayga/Pictures/Saved Pictures/s.jpg';
backgroundImage[2] = 'C:/Users/jayga/Pictures/Saved Pictures/download.jpg';
function displayAllImages() {
// Here has to be some error!!! //
for (i = 0; i < backgroundImage.length; i++) {
document.write("<img src='" + backgroundImage[i] + "' width='160' height='120'/><span>" , "</span>");
}
}
</script>
</head>
<body>
<div id="container">
<div class="backgroundImage">
<script>displayAllImages();</script>
</div>
</div>
</body>
</html>
```

OUTPUT:



PROGRAM 15

AIM: Write a program to create Frames and display images & hyperlinks in HTML.

CODE:

Frm.html

```
<html>
<frameset cols="30%,*,30%">
<frame src="abc.htm">
<frame src="efg.htm">
<frame src="xyz.htm">
</frameset>
</html>
```

Abc.html

```
<html>
<body>
<h2><center>File ABC</h2>

<br><br>
<a href="ijk.htm">Hyperlink of other file</a>
</body>
</html>
```

Def.html

```
<html>
<body>
<h2><center>File EFG</h2>

<br><br>
<a href="ijk.htm">Hyperlink of other file</a>
</body>
</html>
```

Xyz.html

```
<html>
<body>
<h2><center>File XYZ</h2>

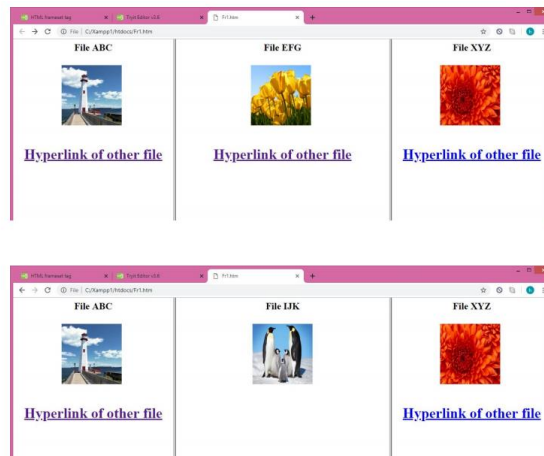
<br><br>
<a href="ijk.htm">Hyperlink of other file</a>
</body>
</html>
```

Ijk.html


```
<html>
<body>
<h2><center>File IJK</h2>

</body>
</html>
```

OUTPUT:



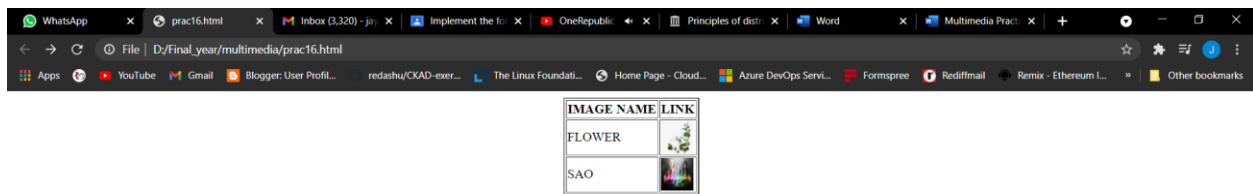
PRACTICAL 16

AIM: Write a program to use table tag and images as hyperlink in HTML.

CODE:

```
<html>
<body>
<table align='center' border='2'>
<tr><th>IMAGE NAME <th>LINK
<tr><td>FLOWER
<td><a href='D:\Final_year\multimedia\pract11.html'><img src='C:/Users/jayga/Pictures/Saved
Pictures/portfolio.jpg' height="40px" width="40px">
</img></a>
<tr><td>SAO
<td><a href='ijk.html'><img src='C:/Users/jayga/Pictures/Saved Pictures/533007.png' height="40px"
width="40px"></img></a>
</table>
</body>
</html>
```

OUTPUT:



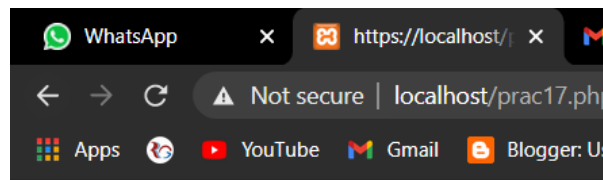
PROGRAM 17

AIM: Write a program to implement Associative Array in PHP.

CODE:

```
<?php
$array = array("himani" => 10,"khushbu"=> 11,"aditi" => 13,"devangi" => 14);
//echo count($array);
echo "himani ".$array['himani'];
echo "<br>khushbu ".$array['khushbu'];
echo "<br>aditi ".$array['aditi'];
?>
```

OUTPUT:



jayesh 10
mudit 14
manas 11
abhay 13

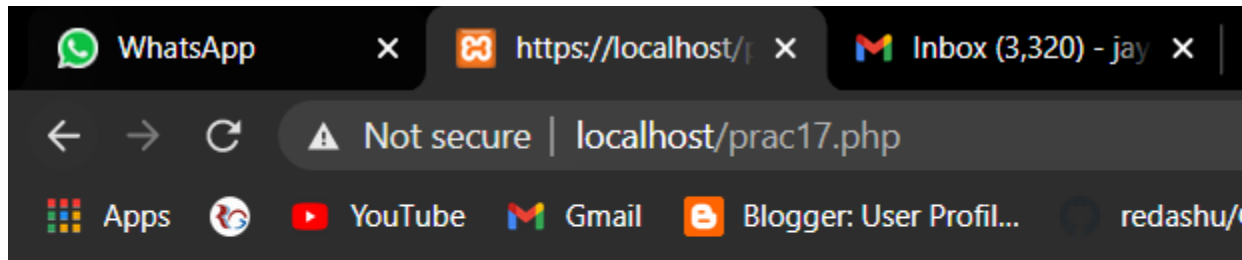
PROGRAM 18

AIM: Write a program to implement Switch Case in PHP.

CODE:

```
<?php
$subject = "N";
switch ($subject)
{
case "J":
echo "Your favorite subject is JAVA! ";
break;
case "M":
echo "Your favorite subject is MULTIMEDIA! ";
break;
case "G":
echo "Your favorite subject is GRAPHICS!";
break;
case "N":
echo "Your favorite subject is NETWORK!";
break;
default:
echo "You don't like any subject!";
}?>
```

OUTPUT:



Your favorite subject is NETWORK!

PROGRAM 19

AIM: Write a program to implement GET and POST method to send data in PHP.

CODE:

1)Form with GET method –

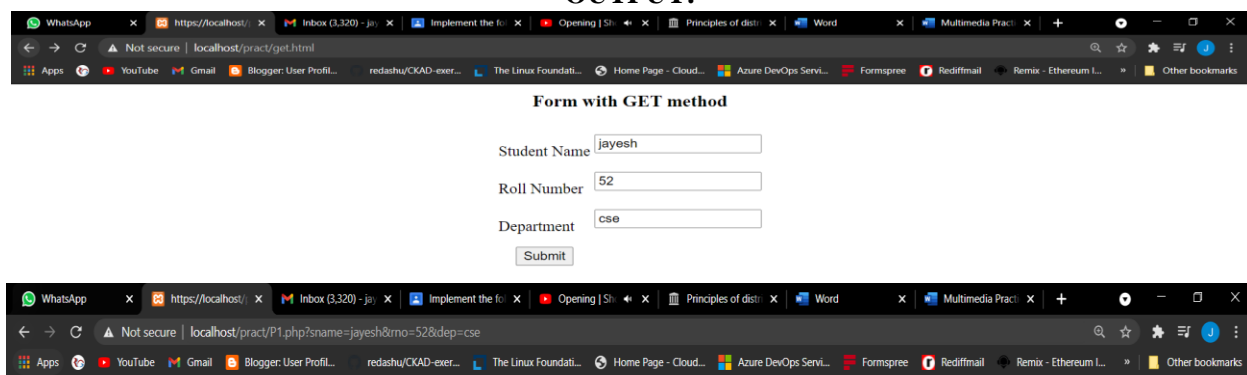
get.html:

```
<html>
<body>
<b><center><h3>Form with GET method <br><br>
<form action="P1.php" method = "get">
<table align='center' >
<tr><td col span='2' align='center' >
<tr><td>Student Name <td><input type="Textbox" name="sname" >
<br><br>
<tr><td>Roll Number <td><input type="Text" name="rno" ><br><br>
<tr><td>Department <td><input type="Text" name="dep" ><br><br>
<tr><td align='center' col span='2'><input type="submit" >
</table>
</form>
</body>
</html>
```

p1.php:

```
<?php
echo "<center>";
echo "Get Form Example"."<br>";
echo "Welcome ".$_GET["sname"]."<br>";
echo "Your Roll Number is ".$_GET["rno"]."<br>";
echo "Your Department is ".$_GET["dep"];
?>
```

OUTPUT:



2)Form with POST method –

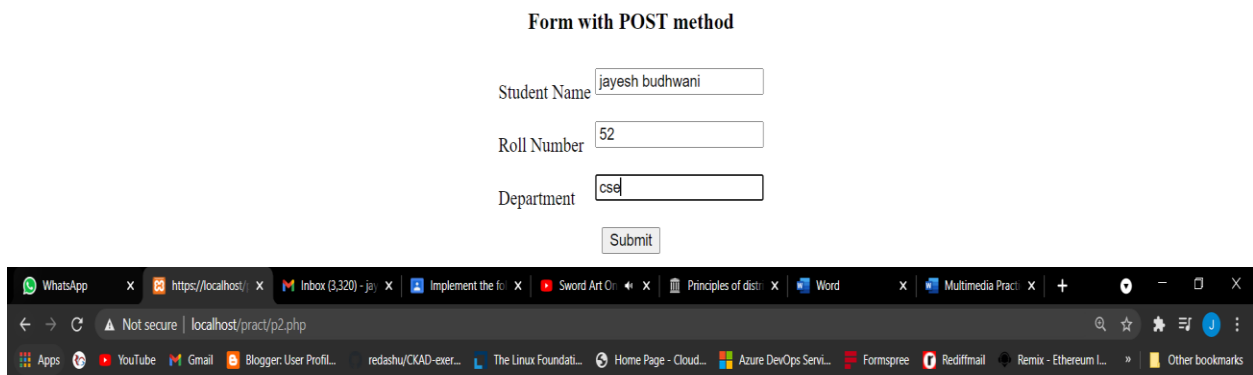
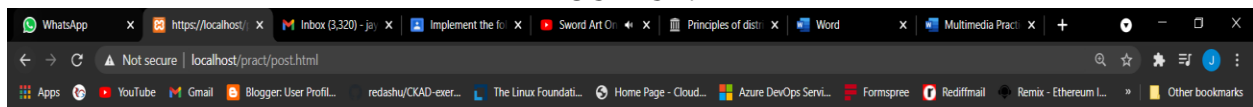
post.html:

```
<html>
<body>
<b><center><h3>Form with POST method <br><br>
<form action="p2.php" method = "post">
<table align='center' >
<tr><td colspan='2' align='center' >
<tr><td>Student Name <td><input type="Textbox" name="sname" ><br><br>
<tr><td>Roll Number <td><input type="Text" name="rno" ><br><br>
<tr><td>Department <td><input type="Text" name="dep" ><br><br>
<tr><td align='center' colspan='2'><input type="submit" >
</table>
</form>
</body>
</html>
```

p2.php:

```
<?php
echo "<center>";
echo "Post Form Example","<br>";
echo "Welcome ".$_POST["sname"]."<br><br>";
echo "Your Roll Number is ".$_POST["rno"]."<br><br>";
echo "Your Department is ".$_POST["dep"];
?>
```

OUTPUT:



PRACTICAL 20

AIM: Write HTML Code for railways Reservation System.

CODE:

Sign.html:

```
<html>
<body>
<table align='center' border="1" bordercolor="white">
<tr>
<td colspan="2">
<center>
<font color="black" size="13" face="Times New Roman">RAILWAY RESERVATION
SYSTEM<br><br>
<center><font color="black" size="12" face="Times New Roman">SIGN
IN</td><tr><td><center>User Id <td><br><center><input type="Textbox" >
<br><br></td><tr>
<td><center>Password <td>
<br><center><input type ="password" ><br><br><br></td><tr><br><td colspan="2">
<center><font color="black" size="5" face="Times New Roman">
<input type="button" onclick="location.href ='traininfo.html';"value="Submit" /><br><br>
</table>
</body>
</html>
```

Traininfo.html:

```
<html>
<body>
<table align='center' border="1" bordercolor="white">
<tr><td colspan="2"><center><font color="BLACK" size="13" face="Times New Roman">RAILWAY
RESERVATION SYSTEM
<br><br>
<tr><td colspan="2"><center><font color="black" size="12" face="Times New Roman">TRAIN
DETAILS <br>
<tr><td><center>Select Station From
<td><br><center><input type="Textbox" ><br><br>
<tr><td><center>Select Station To
<td><br><center><input type="Textbox" ><br><br>
<tr><td><center>Train Name
<td><br><center><input type="Textbox" ><br><br>
<tr><td><center>Select Journey Date
<td><br><center><input type="date" /><br><br>
<tr><td align='center' colspan="2"><br>
<input type="button" onclick="location.href='person.html';" value="Submit" /><br><br>
</table>
</body>
</html>
```

Persondetail.html:

```

<html>
<body>
<table align='center' border="1" bordercolor="white">
<tr><td colspan="2"><center><font color="black" size="13" face=
"Times New Roman">RAILWAY RESERVATIO SYSTEM<br><br>
<tr><td colspan="2"><center><font color="black" size="12" face="Times New Roman">PERSON
DETAILS<br>
<tr><td><table align="center" border="1" >
<tr><td><b>Passenger Name<td><b>Age <td><b>Berth Preference <td><b>Adhar card Number
<tr><td><center><input type="Textbox" ><td><center><input type="Textbox" ><td><center><input
type="Textbox" ><td><center>
<input type="Textbox" >
<tr><td><center><input type="Textbox" ><td><center><input type="Textbox" ><td><center><input
type="Textbox" ><td><center>
<input type="Textbox" >
<tr><td><center><input type="Textbox" ><td><center><input type="Textbox" ><td><center><input
type="Textbox" ><td><center>
<input type="Textbox" >
<tr><td><center><input type="Textbox" ><td><center><input type="Textbox" ><td><center><input
type="Textbox" ><td><center>
<input type="Textbox" >
<tr><td><center><input type="Textbox" ><td><center><input type="Textbox" ><td><center><input
type="Textbox" ><td><center>
<input type="Textbox" >
</table>
<tr><td colspan="2"><center>Mobile No.<input type="Textbox" /><br>
<tr><td align='center' colspan="2"><br>
<input type="button" onclick="location.href='bankdetail.html';" value="Make Payment" />
<br><br>
</table>
</body>
</html>

```

Bankdetail.html:

```

<html>
<body>
<table align='center' border="1" bordercolor="white">
<tr><td colspan="2"><center><font color="black" size="13" face=
"Times New Roman">RAILWAY RESERVATION SYSTEM<br><br>
<tr><td colspan="2"><center><font color="black" size="12" face="Times New Roman">BANK
DETAILS<br>
<tr><td><center>Select Payment Type

```



```

<td><br><center><input type="Textbox" ><br>
<tr><td><center>Select Bank Name
<td><br><center><input type="Textbox" ><br>
<tr><td><center>Name on Card
<td><br><center><input type="Textbox" ><br>
<tr><td><center>Number on Card
<td><br><center><input type="Textbox" ><br>
<tr><td><center>CVV/CWV No.
<td><br><center><input type="Textbox" ><br>
<tr><td><center>Expiry Date
<td><br><center><input type="date" ><br>
<tr><td align='center' colspan='2'><br>
<input type="button" onclick="location.href='confirm.html';" value="Pay"/>
<br><br>
</table>
</body>
</html>

```

Confirm.html:

```

<html>
<body>
<table align='center' border="1" bordercolor="white">
<tr><td colspan="2"><center><font color="BLACK" size="13" face=
"Times New Roman">RAILWAY RESERVATION SYSTEM<br><br>
<tr><td colspan="2"><center><font color="black" size="12" face="Times New Roman">
<br><br>
Your Reservation is Confirm.....!
<br><br><br>
</table>
</body>
</html>

```

OUTPUT:

WhatsApp | Implement the following pr | Naruto Soundtrack: S... | Word | Multimedia Practical 20-23 | sign.html

D:/xampp/htdocs/rail/sign.html

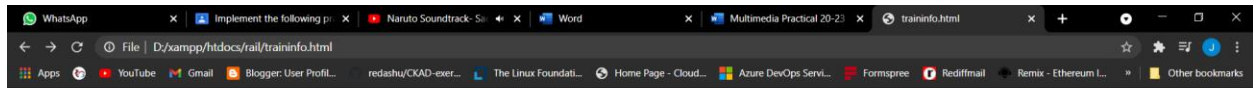
Apps | YouTube | Gmail | Blogger: User Profil... | redashu/CKAD-exer... | The Linux Foundati... | Home Page - Cloud... | Azure DevOps Servi... | Formspree | Redifmail | Remix - Ethereum L... | Other bookmarks

RAILWAY RESERVATION SYSTEM

SIGN IN

User Id

Password



RAILWAY RESERVATION SYSTEM

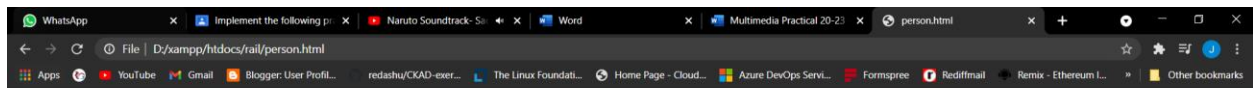
TRAIN DETAILS

Select Station From

Select Station To

Train Name

Select Journey Date

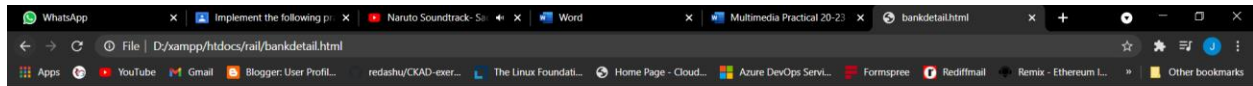


RAILWAY RESERVATIO SYSTEM

PERSON DETAILS

Passenger Name	Age	Berth Preference	Adhar card Number
abod	10	w	abod
pqrs	20	w	pqrs

Mobile No.



RAILWAY RESERVATION SYSTEM

BANK DETAILS

Select Payment Type

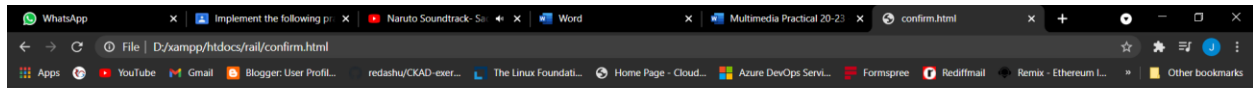
Select Bank Name

Name on Card

Number on Card

CVV/CVV No.

Expiry Date



RAILWAY RESERVATION SYSTEM

Your Reservation is Confirm.....!

PROGRAM 21

AIM: Write a program to implement include and require function in PHP.

CODE:

w.php

```
<?php
echo "<center>";
include"h.php";
echo"<br><br><br><br>";
echo "It is content part of website";
echo"<br><br><br><br>";
require "f.php";
?>
```

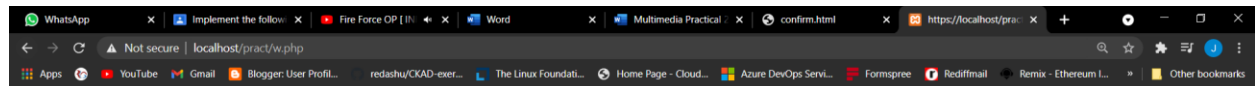
h.php

```
<?php
echo "It is Header of webssite.....!";
?>
```

f.php

```
<?php
echo "It is Footer of webssite.....!";
?>
```

OUTPUT:



It is Header of webssite.....!

It is content part of website

It is footer of Website.....!

PROGRAM 22

AIM: Write a program to implement internal and external hyper link.

CODE:

1.) hyper.html

```
<html>
<body>
<table align='center' border='2'>
<tr><th>Image Name <th>Link Type <th>Link
<tr><td>w.php
<td>internal link
<td><a href='w.php'>click here
</a>
<tr><td>gfg
<td>External link
<td><a href='https://www.geeksforgeeks.org/gate-cs-notes-gg/'>click here
</td>
</table>
</body>
</html>
```

2.) ijk.html

```
<html>
<body>
<h2><center>File IJK</h2>
this is internal hyper link.
</body>
</html>
```

OUTPUT:

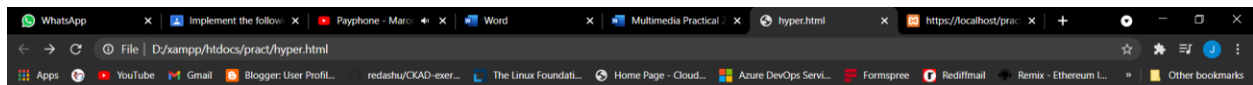
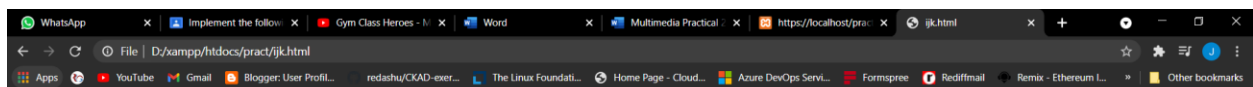


Image Name	Link Type	Link
html page	internal link	click here
gfg	External link	click here



File IJK

this is internal hyper link.

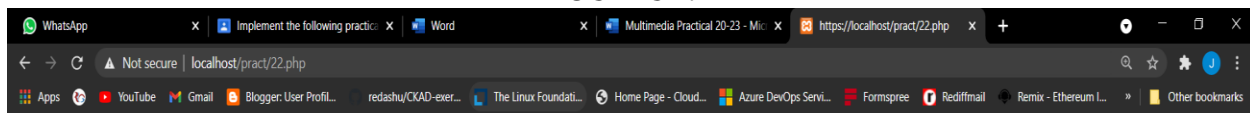
PROGRAM 23

AIM: Write a program to implement substr() and explode() for string manipulation in PHP.

CODE:

```
<?php
echo "USE OF SUBSTR() FUNCTION ","<br>";
echo "Original string = Multimedia Computing";
echo "<br>";
echo "substr(Multimedia Computing,0,8)= ".substr("Multimedia Computing",0,8)."<br>";
echo "substr(Multimedia Computing,6,6)= ".substr("Multimedia Computing",6,6)."<br>";
echo "substr(Multimedia Computing,0,-1)= ".substr("Multimedia Computing",0,-1)."<br>";
echo "substr(Multimedia Computing,-10,-2)= ".substr("Multimedia Computing",-10,-2)."<br>";
echo "<br><br>";
echo "USE OF EXPLODE() FUNCTION ";
$str = 'Multimedia :computing';
echo "<br>";
// zero limit
print_r(explode(',',$str,5));
echo "<br>";
// positive limit
print_r(explode(',',$str,2));
echo "<br>";
// negative limit
print_r(explode(',',$str,-1));
?>
```

OUTPUT:



```
USE OF SUBSTR() FUNCTION
Original string = Multimedia Computing
substr(Multimedia Computing,0,8)= Multimed
substr(Multimedia Computing,6,6)= edia C
substr(Multimedia Computing,0,-1)= Multimedia Computin
substr(Multimedia Computing,-10,-2)= Computi

USE OF EXPLODE() FUNCTION
Array ( [0] => Multimedia :computing )
Array ( [0] => Multimedia :computing )
Array ( )
```