

DATA STRUCTURES

12.DYNAMICALY INITIALIZE AND PRINT ARRAY ELEMENTS

```
#include<stdio.h>

int main()
{
    int n,a[50],i;

    printf("enter size of array");

    scanf("%d",&n);

    for(i=0;i<n;i++)
    {
        printf("enter element %d=", i+1);

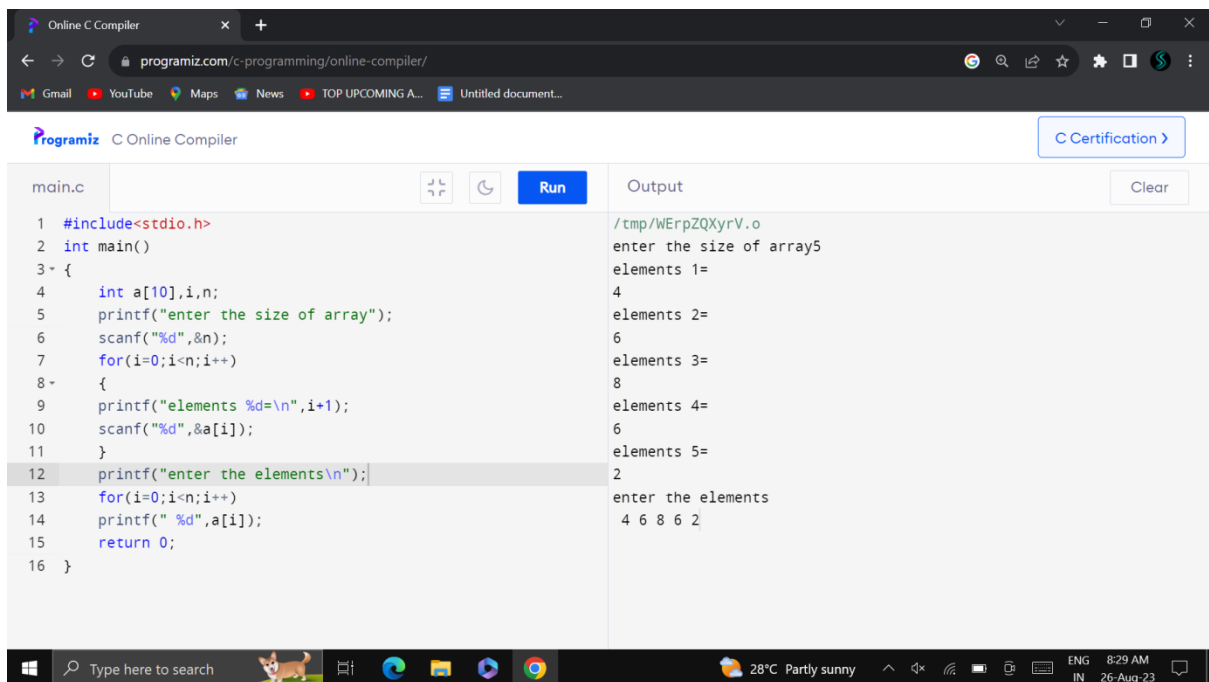
        scanf("%d",&a[i]);
    }

    printf("array elements are\n");

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

    printf("%3d",a[i]);

    return 0;
}
```



The screenshot shows a web browser window with the URL `programiz.com/c-programming/online-compiler/`. The page displays the "Online C Compiler" interface. On the left, the code editor shows a C program (main.c) that prompts the user to enter the size of an array and then enters elements one by one. The code is as follows:

```
1 #include<stdio.h>
2 int main()
3 {
4     int a[10],i,n;
5     printf("enter the size of array");
6     scanf("%d",&n);
7     for(i=0;i<n;i++)
8     {
9         printf("elements %d=\n",i+1);
10        scanf("%d",&a[i]);
11    }
12    printf("enter the elements\n");
13    for(i=0;i<n;i++)
14        printf(" %d",a[i]);
15    return 0;
16 }
```

On the right, the "Output" window shows the program's execution. It prompts for the size of the array (5) and then enters elements 1 through 5. The final output displays the array elements: 4 6 8 6 2.

```
/tmp/WErpZQXyrV.o
enter the size of array5
elements 1=
4
elements 2=
6
elements 3=
8
elements 4=
6
elements 5=
2
enter the elements
4 6 8 6 2
```

13.SUM ARRAY ELEMENTS

```

#include<stdio.h>

int main()
{
    int n,a[50],i,s=0;
    printf("enter size of array");
    scanf("%d",&n);
    for(i=0;i<n;i++)
    {
        printf("enter element %d=", i+1);
        scanf("%d",&a[i]);
        s=s+a[i];
    }
    printf("sum=%d",s);
    return 0;
}

```

The screenshot shows a web browser window with the URL `programiz.com/c-programming/online-compiler/`. The page features the Programiz logo and an IBM advertisement. The main area displays a C program in a text editor, with a 'Run' button and an 'Output' window. The program calculates the sum of an array of 5 elements. The output window shows the execution results, including the size of the array (5) and the sum of its elements (15).

```

main.c
1  #include<stdio.h>
2  int main()
3  {
4      int a[10],i,n,sum=0;
5      printf("enter the size of array");
6      scanf("%d",&n);
7      for(i=0;i<n;i++)
8      {
9          printf("elements %d=\n",i+1);
10         scanf("%d",&a[i]);
11     }
12     {
13         for(i=0;i<n;i++)
14             sum=sum+a[i];
15     }
16     printf("%d",sum);
17     return 0;
18 }

```

Output

```

/tmp/qjztIESnvf.o
enter the size of array5
elements 1=
1
elements 2=
2
elements 3=
3
elements 4=
4
elements 5=
5
15

```

14.SUM OF ODD AND EVEN NUMBERS IN THE ARRAY

```

#include<stdio.h>

```

```

int main()

```

```

{

```

```

int a[50],n,es=0,os=0,i;

printf("enter size of the array");

scanf("%d",&n);

for(i=0;i<n;i++)
{
    printf("enter element %d ",i+1);
    scanf("%d",&a[i]);
}

for(i=0;i<n;i++)
{
    if(i%2==0)
    es=es+a[i];
    else
    os=os+a[i];
}

printf("evensum=%d\noddsun=%d",es,os);

return 0;
}

```

The screenshot shows a web browser window with the URL `programiz.com/c-programming/online-compiler/`. The page title is "Online C Compiler". Below the browser window, there is a "Programiz C Online Compiler" interface. The code editor on the left contains the following C code:

```

1 #include<stdio.h>
2 int main()
3 {
4     int a[10],i,n,es=0,os=0;
5     printf("enter the size of array");
6     scanf("%d",&n);
7     for(i=0;i<n;i++)
8     {
9         printf("elements %d=\n",i+1);
10        scanf("%d",&a[i]);
11    }
12    for(i=0;i<n;i++)
13    {
14        if(a[i]%2==0)
15        {
16            es=es+a[i];
17        }
18        if(a[i]%2!=0)
19        {
20            os=os+a[i];
21        }
22    }
23    printf("even sum=%d\n",es);
24    printf("odd sum=%d\n",os);
25    return 0;
}

```

The output window on the right shows the following text:

```

/tmp/qjztIESnvf.o
enter the size of array5
elements 1=
1
elements 2=
2
elements 3=
3
elements 4=
4
elements 5=
5
even sum=6
odd sum=9

```

The bottom of the screenshot shows a Windows taskbar with the date and time "26-Aug-23" and "9:13 AM".

15.INSERTING AN ELEMENT IN AN ARRAY

```
#include<stdio.h>

int main()
{
    int i,a[50],n,x,p;
    printf("enter array size");
    scanf("%d",&n);
    printf("enter %d values\n",n);
    for(i=0;i<n;i++)
        scanf("%d",&a[i]);
    printf("enter number to be inserted");
    scanf("%d",&x);
    printf("enter insert position");
    scanf("%d",&p);
    for(i=n;i>=p;i--)
    {
        a[i]=a[i-1];
    }
    a[p]=x;
    n++;
    for(i=0;i<n;i++)
        printf("%3d",a[i]);
    return 0;
}
```

The screenshot shows a web browser window with the URL `programiz.com/c-programming/online-compiler/`. The browser's address bar and tabs are visible at the top. Below the browser, the 'Programiz Online Compiler' interface is shown. On the left, a C program is displayed in a text editor, and on the right, the program's output is shown in a separate window.

```
main.c
3 * {
4     int a[10], i, n, p, x;
5     printf("enter the size of array\n");
6     scanf("%d", &n);
7     printf("enter the position\n");
8     scanf("%d", &p);
9     printf("enter the insertion element\n");
10    scanf("%d", &x);
11    printf("elements are\n");
12    for(i=0; i<n; i++)
13    {
14        scanf("%d", &a[i]);
15    }
16    for(i=n; i>=p; i--)
17    {
18        a[i]=a[i-1];
19    }
20    a[p]=x;
21    n++;
22    for(i=0; i<n; i++)
23    {
24        printf("%d", a[i]);
25    }
26    return 0;
27 }
```

The output window on the right shows the following text:

```
/tmp/ogghP6SCvA.o
enter the size of array
5
enter the position
4
enter the insertion element
8
elements are
1
2
3
4
5
123845
```

16.DELETE AN ELEMENT IN THE ARRAY

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
    int a[10], i, j, n, x;
```

```
    printf("enter array size");
```

```
    scanf("%d", &n);
```

```
    printf("enter %d values\n", n);
```

```
    for(i=0; i<n; i++)
```

```
    {
        scanf("%d", &a[i]);
```

```
    }
    printf("enter number to be deleted");
```

```
    scanf("%d", &x);
```

```
    for(i=0; i<n; i++)
```

```
    {
```

```
        if(a[i]==x)
```

```
        {
```

```
            for(j=i; j<n; j++)
```

```
            {
```

```
                a[j]=a[j+1];
```

```

    }

    n--;

}

}

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

printf("%3d",a[i]);

}

```

The screenshot shows a web browser window with the URL `programiz.com/c-programming/online-compiler/#google_vignette`. The page features a header for 'Programiz C Online Compiler' and a banner for a 'Full Web Development Course - Full-Stack Training Course'. The main area displays a C program in a text editor, with a 'Run' button and an 'Output' window. The program is as follows:

```

main.c
4  int a[10],i,j,n,p,x;
5  printf("enter the size of array\n");
6  scanf("%d",&n);
7  printf("enter the position\n");
8  scanf("%d",&p);
9  printf("enter the element to be deleted\n");
10 scanf("%d",&x);
11 printf("elements are");
12 for(i=0;i<n;i++)
13 {
14     scanf("%d",&a[i]);
15 }
16 for(i=0;i<n;i++)
17 {
18     if(x==a[i])
19     {
20         for(j=i;j<n;j++)
21         {
22             a[j]=a[j+1];
23         }
24         n--;
25     }
26 }
27 for(i=0;i<n;i++)
28 {
29     printf("%3d",a[i]);
30 }
31 return 0;

```

The 'Output' window shows the following text:

```

/tmp/X3rmDhumeP.o
enter the size of array
5
enter the position
4
enter the element to be deleted
40
elements are10
20
30
40
50
10 20 30 50

```

17.MERGING TWO ARRAYS

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```

    int a[50],b[50],c[100],m,n,i,j;

    printf("enter size of 1st array");

    scanf("%d",&m);

    printf("enter size of 2nd array");

    scanf("%d",&n);

    printf("enter %d first array elements\n",m);

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

```

```

scanf("%d",&a[i]);

printf("enter %d second array elements\n",n);

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

scanf("%d",&b[i]);

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

{

c[i]=a[i];

}

j=i;

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

{

c[j]=b[i];

j++;

}

for(i=0;i<m+n;i++)

printf("%3d",c[i]);

return 0;

}

```

The screenshot shows a web browser window with the URL `programiz.com/c-programming/online-compiler/`. The browser's address bar and tabs are visible at the top. Below the browser window is the Programiz Online Compiler interface. It features a code editor on the left with a C program, a 'Run' button, and an 'Output' window on the right. The code in the editor is the same as the one shown in the previous block. The output window displays the program's execution results, including prompts for array sizes and the resulting array elements.

```

main.c
1 #include<stdio.h>
2 int main()
3 {
4     int a[50],b[50],c[100],m,n,i,j;
5     printf("enter size of 1st array");
6     scanf("%d",&m);
7     printf("enter size of 2nd array");
8     scanf("%d",&n);
9     printf("enter %d first array elements\n",m);
10    for(i=0;i<m;i++)
11        scanf("%d",&a[i]);
12    printf("enter %d second array elements\n",n);
13    for(i=0;i<n;i++)
14        scanf("%d",&b[i]);
15    for(i=0;i<m;i++)
16    {
17        c[i]=a[i];
18    }
19    j=i;
20    for(i=0;i<n;i++)
21    {
22        c[j]=b[i];
23        j++;
24    }
25    for(i=0;i<m+n;i++)
26        printf("%3d",c[i]);
27    return 0;
28 }

```

Output

```

/tmp/3V2nQdZlw4.o
enter size of 1st array5
enter size of 2nd array5
enter 5 first array elements
1
2
3
4
5
enter 5 second array elements
6
7
8
9
0
1 2 3 4 5 6 7 8 9 0

```

18.FINDING DUPLICATE ELEMENTS

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
    int a[100],i,j,n,c=0;
```

```
    printf("enter array size");
```

```
    scanf("%d",&n);
```

```
    printf("enter array elements\n");
```

```
    for(i=0;i<n;i++)
```

```
        scanf("%d",&a[i]);
```

```
    for(i=0;i<n;i++)
```

```
    {
```

```
        c=0;
```

```
        for(j=i+1;j<n;j++)
```

```
        {
```

```
            if(a[i]==a[j])
```

```
                c++;
```

```
        }
```

```
        if(c!=0)
```

```
            printf("\n%d\n",a[i]);
```

```
    }
```

```
}
```


The screenshot shows a web browser window with the URL `programiz.com/c-programming/online-compiler/`. The browser's address bar and tabs are visible at the top. Below the browser, the Programiz Online Compiler interface is shown. It has a 'main.c' tab and a 'Run' button. The code in the editor is as follows:

```
1 #include<stdio.h>
2 int main()
3 {
4     int a[100],i,j,n,c=0;
5     printf("enter array size");
6     scanf("%d",&n);
7     printf("enter array elements\n");
8     for(i=0;i<n;i++)
9         scanf("%d",&a[i]);
10    for(i=0;i<n;i++)
11    {
12        c=0;
13        for(j=i+1;j<n;j++)
14        {
15            if(a[i]==a[j])
16                c++;
17        }
18        if(c!=0)
19            printf("\n%d\n",a[i]);
20    }
21 }
22
23
24
```

The output window on the right shows the following text:

```
/tmp/3V2mQdZMw4.o
enter array size5
enter array elements
1
2
5
6
2
2
```

At the bottom of the browser window, the Windows taskbar is visible, showing the search bar, task view button, and several application icons. The system tray on the right shows the temperature (30°C), time (10:04 PM), and date (26-Aug-23).

19.FINDING GREATEST ELEMENT IN AN ARRAY

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
    int a[50],n,i,max;
```

```
    printf("enter size of the array");
```

```
    scanf("%d",&n);
```

```
    for(i=0;i<n;i++)
```

```
    {
```

```
        printf("enter element %d ",i+1);
```

```
        scanf("%d",&a[i]);
```

```
    }
```

```
    max=a[0];
```

```
    for(i=0;i<n;i++)
```

```
    {
```

```
        if(max<a[i])
```

```
            max=a[i];
```

```
}
```

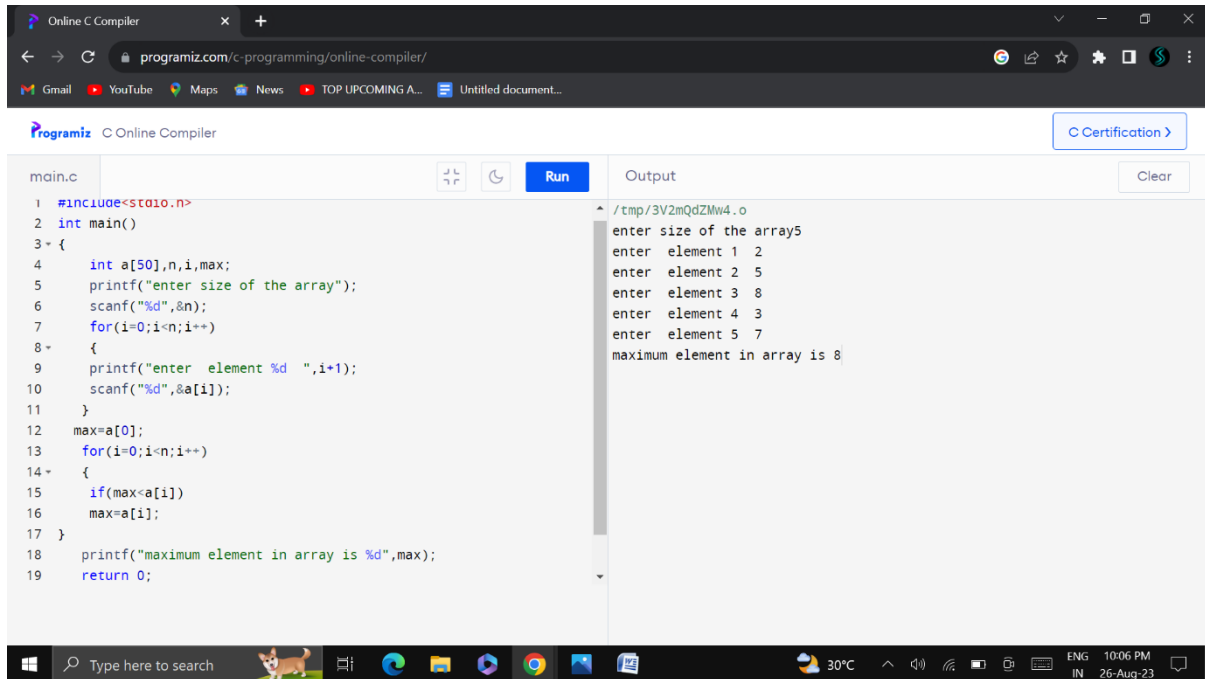
```

printf("maximum element in array is %d",max);

return 0;

}

```



The screenshot shows a web browser window with the URL 'programiz.com/c-programming/online-compiler/'. The page title is 'Online C Compiler'. The code editor contains the following C code:

```

1 #include<stdio.h>
2 int main()
3 {
4     int a[50],n,i,max;
5     printf("enter size of the array");
6     scanf("%d",&n);
7     for(i=0;i<n;i++)
8     {
9         printf("enter element %d ",i+1);
10        scanf("%d",&a[i]);
11    }
12    max=a[0];
13    for(i=0;i<n;i++)
14    {
15        if(max<a[i])
16            max=a[i];
17    }
18    printf("maximum element in array is %d",max);
19    return 0;

```

The output window on the right shows the following text:

```

/tmp/3V2mQdZMw4.o
enter size of the arrays
enter element 1 2
enter element 2 5
enter element 3 8
enter element 4 3
enter element 5 7
maximum element in array is 8

```

20.LINEAR SEARCH

```

#include<stdio.h>

int main()
{
    int n,a[50],i,x;

    printf("enter size of array");

    scanf("%d",&n);

    printf("enter elements\n");

    for(i=0;i<n;i++)
    {
        scanf("%d",&a[i]);

    }

    printf("enter search element");

    scanf("%d",&x);

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

```

```

    {

        if(a[i]==x)

            printf("%d element found at %d ",x,i+1);

    }

    return 0;

}

```

The screenshot shows a web browser window with the URL `programiz.com/c-programming/online-compiler/#google_vignette`. The page title is "Online C Compiler". The main content area is divided into two sections: "main.c" on the left and "Output" on the right. The "main.c" section contains the following C code:

```

1 #include<stdio.h>
2 int main()
3 {
4     int n,a[50],i,x;
5     printf("enter size of array");
6     scanf("%d",&n);
7     printf("enter search element");
8     scanf("%d",&x);
9     printf("enter elements\n");
10    for(i=0;i<n;i++)
11    {
12        scanf("%d",&a[i]);
13    }
14
15    for(i=0;i<n;i++)
16    {
17        if(a[i]==x)
18            printf("%d element found at %d ",x,i+1);
19    }
20
21    return 0;
22

```

The "Output" section shows the following text:

```

/tmp/2mQyHlbcGk.o
enter size of array5
enter search element4
enter elements
1
2
3
4
5
4 element found at 4

```

The bottom of the screenshot shows a Windows taskbar with the search bar, task view button, and several application icons. The system tray shows the temperature as 30°C, the time as 10:15 PM, and the date as 26-Aug-23.

21BINARY SEARCH

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
int n,a[50],i,l,m,h,x;
```

```
    printf("enter size of array");
```

```
    scanf("%d",&n);
```

```
    printf("enter elements\n");
```

```
    for(i=0;i<n;i++)
```

```
    {
```

```
        scanf("%d",&a[i]);
```

```
}  
  
printf("enter search element");  
  
scanf("%d",&x);  
  
l=0;  
  
h=n;  
  
while(l<=h)  
{  
    m=(l+h)/2;  
    if(x==a[m])  
    {  
        printf("%d element found at %d",x,m);  
        break;  
    }  
    else if(x<a[m])  
        h=m-1;  
    else  
        l=m+1;  
}  
return 0;  
}
```

The screenshot shows a web browser window with the URL `programiz.com/c-programming/online-compiler/#google_vignette`. The browser's address bar and tabs are visible at the top. Below the browser, the Programiz Online Compiler interface is shown. On the left, a C program for binary search is displayed in a text editor. The code includes headers for `stdio.h` and `string.h`, and implements a `main` function that reads array size, search element, and performs a binary search. On the right, the 'Output' window shows the program's execution: it prompts for array size (5), search element (88), and prints the element's position (88) and the number of elements (66). The Windows taskbar at the bottom shows the system clock as 10:21 PM on 26-Aug-23.

```
main.c
1 // C program to find an element in an array using binary search
2 #include <stdio.h>
3 #include <string.h>
4 int n,a[50],l,m,h,x;
5 printf("enter size of array\n");
6 scanf("%d",&n);
7 printf("enter search element\n");
8 scanf("%d",&x);
9 printf("enter elements\n");
10 for(i=0;i<n;i++)
11 {
12     scanf("%d",&a[i]);
13 }
14
15
16 l=0;
17 h=n;
18
19 while(l<=h)
20 {
21     m=(l+h)/2;
22     if(x==a[m])
23     {
24         printf("%d element found at %d",x,m);
25         break;
26     }
27     else if(x>a[m])
28         h=m-1;
29     else
30         l=m+1;
31 }
32 return 0;
33 }
```

Output

```
/tmp/2n0yHtMccGk.o
enter size of array5
enter search element88
enter elements
66
77
88
99
55
88 element found at 2
```

21.REVERSING THE GIVEN STRING

```
#include<stdio.h>
```

```
#include<string.h>
```

```
int main()
```

```
{
```

```
    char str[50];
```

```
    int i,l;
```

```
    printf("enter string\n");
```

```
    scanf("%s",&str);
```

```
    l=strlen(str);
```

```
    for(i=l-1;i>=0;i--)
```

```
        printf("%c",str[i]);
```

```
}
```

The screenshot shows a web browser window with the URL `programiz.com/c-programming/online-compiler/#google_vignette`. The page title is "Online C Compiler". The main content area is divided into two panels. The left panel, titled "main.c", contains the following C code:

```
1 #include<stdio.h>
2 #include<string.h>
3 int main()
4 {
5     char str[50];
6     int i,l;
7     printf("enter string\n");
8     scanf("%s",&str);
9     l=strlen(str);
10    for(i=l-1;i>=0;i--)
11        printf("%c",str[i]);
12 }
13
14
15
```

The right panel, titled "Output", shows the execution results:

```
/tmp/2mQyHmBcGk.o
enter string
AKHIL
LIHKA
```

At the bottom of the browser window, the Windows taskbar is visible, showing the search bar, task icons, and system tray with a temperature of 30°C and the date 26-Aug-23.

22.STRING PALINDROME

```
#include<stdio.h>
```

```
#include<string.h>
```

```
int main()
```

```
{
```

```
    char str[50],c[50];
```

```
    int i,l,s,e,j;
```

```
    printf("enter string\n");
```

```
    scanf("%s",&str);
```

```
    e=strlen(str)-1;
```

```
    s=0;
```

```
    while(s<e)
```

```
    {
```

```
        if(str[s++]!=str[e--])
```

```
        {
```

```
            printf("not palindrome");
```

```
            return 0;
```

```
    }
```

```

    }

    printf("palindrome");

}

```

The screenshot shows a web browser window with the URL `programiz.com/c-programming/online-compiler/#google_vignette`. The page title is "Online C Compiler". The main content area is divided into two panes. The left pane, titled "main.c", contains the following C code:

```

1 #include<stdio.h>
2 #include<string.h>
3 int main()
4 {
5     char str[50],c[50];
6     int i,l,s,e,j;
7     printf("enter string\n");
8     scanf("%s",&str);
9     e=strlen(str)-1;
10    s=0;
11    while(s<e)
12    {
13        if(str[s++]!=str[e--])
14        {
15            printf("not palindrome");
16            return 0;
17        }
18    }
19    }
20    printf("palindrome");
21

```

The right pane, titled "Output", shows the execution results:

```

/tmp/2mQyHlbcGk.o
enter string
MALAYALAM
palindrome

```

The browser's taskbar at the bottom shows the Windows logo, a search bar, and various application icons. The system tray on the right indicates a temperature of 30°C, the time 10:24 PM, and the date 26-Aug-23.

23.VOWELS COUNT IN A STRING

```

#include<stdio.h>

#include<string.h>

int main()
{
    char s[50],c;

    int i,l,n;

    printf("enter string\n");

    scanf("%s",&s);

    n=strlen(s);

    for(i=0;i<n;i++)
    {
        if(s[i]=='a' || s[i]=='e' || s[i]=='i' || s[i]=='o' || s[i]=='u')

        c++;
    }
}

```

```

printf("vowels count=%d",c);
}

```

The screenshot shows a web browser window with the URL `programiz.com/c-programming/online-compiler/#google_vignette`. The page title is "Online C Compiler". Below the browser window, there is a "Programiz Online Compiler" interface. On the left, a code editor shows a C program in `main.c` that counts vowels in a string. The code is as follows:

```

1 #include<stdio.h>
2 #include<string.h>
3 int main()
4 {
5     char s[50],c;
6     int i,l,n;
7     printf("enter string\n");
8     scanf("%s",&s);
9     n=strlen(s);
10    for(i=0;i<n;i++)
11    {
12        if(s[i]=='a' || s[i]=='e' || s[i]=='i' || s[i]=='o' || s[i]=='u')
13            c++;
14    }
15    printf("vowels count=%d",c);
16 }
17
18

```

On the right, the "Output" window shows the execution results:

```

/tmp/2mQyHlbcGk.o
enter string
akhil
vowels count=2

```

The bottom of the image shows a Windows taskbar with the search bar, task view button, and several application icons (Edge, File Explorer, etc.). The system tray shows the temperature as 30°C, the time as 10:28 PM, and the date as 26-Aug-23.

24.MATRIX MULTIPLICATION

```

#include<stdio.h>

int main()
{
    int a[10][10],b[10][10],r1,r2,c1,c2,i,j,k,s=0;

    printf("enter 1st matrix rows and columns\n");
    scanf("%d%d",&r1,&c1);

    printf("enter 2nd matrix rows and columns\n");
    scanf("%d%d",&r2,&c2);

    if(c1==r2)
    {
        printf("enter 1st matrix elements\n");
        for(i=0;i<r1;i++)
        {
            for(j=0;j<c1;j++)
            {
                scanf("%d",&a[i][j]);
            }
        }
    }
}

```



```

        }
        printf("\n");
    }

    printf("enter 2nd matrix elements\n");
    for(i=0;i<r2;i++)
    {
        for(j=0;j<c2;j++)
        {
            scanf("%d",&b[i][j]);
        }
        printf("\n");
    }
    for(i=0;i<r1;i++)
    {
        for(j=0;j<c2;j++)
        {
            for(k=0;k<r2;k++)
            {
                s=s+a[i][k]*b[k][j];
            }
            printf("%4d",s);
            s=0;
        }
        printf("\n");
    }
}

else
    printf("matrix multiplication not possible");
return 0;
}

```

Online C Compiler

programiz.com/c-programming/online-compiler/#google_vignette

Gmail YouTube Maps News TOP UPCOMING A... Untitled document...

Programiz C Online Compiler

main.c

```
1 int main()
2 {
3     int a[10][10], b[10][10], r1, r2, c1, c2, i, j, k, s=0;
4     printf("enter 1st matrix rows and columns\n");
5     scanf("%d%d", &r1, &c1);
6     printf("enter 2nd matrix rows and columns\n");
7     scanf("%d%d", &r2, &c2);
8     if(c1==r2)
9     {
10        printf("enter 1st matrix elements\n");
11        for(i=0; i<r1; i++)
12        {
13            for(j=0; j<c1; j++)
14            {
15                scanf("%d", &a[i][j]);
16            }
17            printf("\n");
18        }
19
20        printf("enter 2nd matrix elements\n");
21        for(i=0; i<r2; i++)
22        {
23            for(j=0; j<c2; j++)
24            {
25                scanf("%d", &b[i][j]);
26            }
27            printf("\n");
28        }
29        for(i=0; i<r1; i++)
30        {
31            for(j=0; j<c2; j++)
32            {
33                for(k=0; k<r2; k++)
34                {
35                    s=a[i][k]*b[k][j];
36                }
37                printf("%d", s);
38                s=0;
39            }
40            printf("\n");
41        }
42    }
43    else
44    {
45        printf("matrix multiplication not possible");
46        return 0;
47    }
```

Output

```
/tmp/2nQyH8cGk.o
enter 1st matrix rows and columns
2
enter 2nd matrix rows and columns
2
enter 1st matrix elements
1 2
3 4
enter 2nd matrix elements
1 2
3 4
7 10
15 22
```

30°C 10:54 PM 26-Aug-23