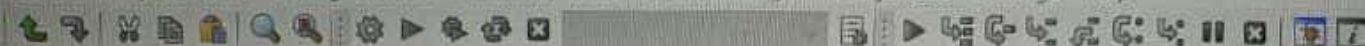main() : int

SC

Start here X 3.c X

```
2    int main ()
3    {
4        int a[50][50],i=0, j=0, row=0, col=0,flag=0;
5        printf ("Enter the order of the matrix (mxn):\n");
6        scanf ("%d %d", &row, &col);
7        printf ("Enter the elements of the matrix\n");
8        for (i = 0; i < row; i++)
9        {
10           for (j = 0; j < col; j++)
11           {
12               scanf ("%d", &a[i][j]);
13           }
14       }
15       for (i = 0; i < row; i++)
16       {
17           for (j = 0; j < col; j++)
18           {
19               if (i == j && a[i][j] != 1)
20               {
21                   flag = -1;
22                   break;
23               }
24               else if (i != j && a[i][j] != 0)
25               {
26                   flag = -1;
27                   break;
28               }
29           }
30       }
31       if (flag == 0)
32       {
33           printf ("it is a identity matrix\n");
34       }
35       else
36       {
37           printf ("it is not an identity matrix\n");
38       }
39       return 0;
```

C:\Users\Rudra\Music\3.exe

```
Enter the order of the matrix (mxn):
3 3
Enter the elements of the matrix
1 0 0
0 1 0
0 0 1
it is a identity matrix

Process returned 0 (0x0)   execution time : 24.151 s
Press any key to continue.
```

ers\Rudra\Music\3.c

Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

main() : int

S C

3.c X

```c
#include <stdio.h>
int main()
{
    int i,j,arr1[40][40],sum=0,n,m=0;
    printf("Input the size of the square matrix : ");
    scanf("%d", &n);
    m=n;
    printf("Input elements in the first matrix :\n");
    for(i=0;i<n;i++)
    {
        for(j=0;j<n;j++)
        {
            printf("element - [%d],[%d] : ",i,j);
            scanf("%d",&arr1[i][j]);
        }
    }
    printf("The matrix is :\n");
    for(i=0;i<n;i++)
    {
        for(j=0;j<n;j++)
            printf("% 4d",arr1[i][j]);
        printf("\n");
    }
    for(i=0;i<n;i++)
    {
        m=m-1;
        for(j=0;j<n ;j++)
        {
            if (j==m)
            {
                sum= sum+arr1[i][j];
            }
        }
    }
    printf("Addition of the  left Diagonal elements is :%d\n",sum);
    return 0;
}
```

Music\3.c

```
C:\Users\Rudra\Music\3.exe                           □

Input the size of the square matrix : 3
Input elements in the first matrix :
element - [0],[0] : 1
element - [0],[1] : 2
element - [0],[2] : 3
element - [1],[0] : 4
element - [1],[1] : 5
element - [1],[2] : 6
element - [2],[0] : 7
element - [2],[1] : 8
element - [2],[2] : 9
The matrix is :
   1   2   3
   4   5   6
   7   8   9
Addition of the  left Diagonal elements is :15

Process returned 0 (0x0)   execution time : 26.525 s
Press any key to continue.
```

main() : int

```c
#include<stdio.h>
int main()
{
    int arr[100],i,n,value,position;
    printf("enter elements in array - \n ");
    scanf("%d",&n);
    printf(" enter %d element\n",n);
    for(i=0;i<n;i++)
    {
        scanf("%d",&arr[i]);
    }
    printf("enter the location where to insert the element\n");
    scanf("%d",&position);
    printf("enter the value to insert\n");
    scanf("%d",&value);
    for(i=n-1;i>=position-1;i--)
        arr[i+1]=arr[i];
    arr[position-1]=value;
    printf("resultant array is\n");
    for(i=0;i<n;i++)
        printf("%d\n",arr[i]);
    return 0;
}
```

```
C:\Users\Rudra\Music\3.exe

enter elements in array -
5
enter 5 element
2
3
4
5
6
enter the location where to insert the element
4
enter the value to insert
10
resultant array is
2
3
4
10
5
6

Process returned 0 (0x0)    execution time : 20.288
Press any key to continue.
```

main() : void

here X 3.c X
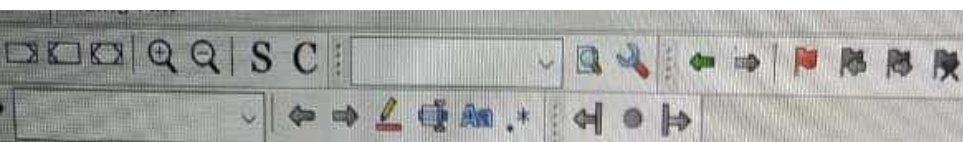
```c
#include <stdio.h>
void main()
{
    int arr1[50],n,i,j=0,lrg,lrg2nd;
        printf("Input the size of array : ");
        scanf("%d",&n);
        printf("Input %d elements in the array :\n",n);
        for(i=0;i<n;i++)
        {
            printf("element - %d : ",i);
            scanf("%d",&arr1[i]);
        }
    lrg=0;
    for(i=0;i<n;i++)
    {
        if(lrg<arr1[i])
        {
            lrg=arr1[i];
            j = i;
        }
    }
    lrg2nd=0;
    for(i=0;i<n;i++)
    {
        if(i==j)
        {
            i++;
            i--;
        }
        else
        {
            if(lrg2nd<arr1[i])
            {
                lrg2nd=arr1[i];
            }
        }
    }
```

C:\Users\Rudra\Music\3.exe

```
Input the size of array : 5
Input 5 elements in the array :
element - 0 : 7
element - 1 : 8
element - 2 : 9
element - 3 : 3
element - 4 : 4
The Second largest element in the array is :  8


Process returned 50 (0x32)   execution time : 9.985
s
Press any key to continue.
```

```c
#include<stdio.h>
int main()
{
    int arr[50],i,max,size,min;
    printf("size of the array : ");
    scanf("%d",&size);
    printf("enter elements in array : ");
    for(i=0;i<size;i++)
    {
        scanf("%d",&arr[i]);
    }
    max=arr[0];
    min=arr[0];
    for(i=1;i<size;i++)
    {
        if(arr[i]>max)
        {
            max=arr[i];
        }
        if(arr[i]<min)
        {
            min=arr[i];
        }
    }
    printf("maximum element = %d\n",max);
    printf("minimum element = %d\n",min);
    return 0;
}
```

```
C:\Users\Rudra\Music\3.exe
size of the array : 7
enter elements in array : 10 20 40 80 64 21 15
maximum element = 80
minimum element = 10

Process returned 0 (0x0)   execution time : 25.398 s
Press any key to continue.
```

Code::Blocks X   Search results X   Cccc X   Build log X   Build messages X   CppCheck/Vera++ X   CppCheck/Vera++ messages

File   Line   Message
          ─── Build file: "no target" in "no project" (compiler: unknown) ───
          ─── Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) ───

search

main() : int

ere X 3.c X

```c
2      int main()
3      {
4          int arr1[100],arr2[100],arr3[100],i,j=0,k=0,size;
5          printf("size of the array - ");
6          scanf("%d",&size);
7          printf("enter elements in array - \n ",size);
8          for(i=0;i<size;i++)
9          {
10             scanf("%d",&arr1[i]);
11         }
12         for(i=0;i<size;i++)
13         {
14             if(arr1[i]%2==0)
15             {
16                 arr2[j]=arr1[i];
17                 j++;
18             }
19             else
20             {
21                 arr3[k]=arr1[i];
22                 k++;
23             }
24         }
25         printf("\n the even elements are - \n ");
26         for(i=0;i<j;i++)
27         {
28             printf("%d",arr2[i]);
29         }
30         printf("\n the odd elements are - \n ");
31         for(i=0;i<k;i++)
32         {
33             printf("%d",arr3[i]);
34         }
35         printf(" \n \n ");
36         return 0;
37     }
38
```

```
C:\Users\Rudra\Music\3.exe

size of the array - 7
enter elements in array -
 21 31 23 20 30 42 5

the even elements are -
203042
the odd elements are -
2131235


Process returned 0 (0x0)    execution time : 28.727 s
Press any key to continue.
```

C/C++   Windows (CR+LF) WINDOWS-1252 Line 7, Col 50, Pos 199

```c
#include<stdio.h>
void main()
{
    int a[50],n,i,sum=0;
    printf("the number of element store in the array: ");
    scanf("%d",&n);
    printf("input %d number of elements in the array: \n ");
    for(i=0;i<n;i++)
    {
        printf("element - %d:",i);
        scanf("%d",&a[i]);
    }
    for(i=0;i<n;i++)
    {
        sum +=a[i];
    }
    printf("sum of all elements stored in the array is: %d\n\n" , sum);
}
```

"C:\Users\Rudra\Music\ass 7.exe"

```
the number of element store in the array: 3
input 446364160 number of elements in the array:
 element - 0:5
element - 1:8
element - 2:7
sum of all elements stored in the array is: 20


Process returned 48 (0x30)    execution time : 6.885 s
Press any key to continue.
```

s & others

Code:Blocks X   Search results X   Cccc X   Build log X   Build messages X   CppCheck/Vera++ X   CppCheck/Vera++ messa

ile   Line Message
                --- Build file: "no target" in "no project" (compiler: unknown) ---
                --- Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(a)) ---

C/C++   Windows (CR+LF)   WINDOWS-1252   Line 12,

search

```c
#include<stdio.h>
void main()
{
    int a[20],n,i;
    printf("the number of element store in the array: ");
    scanf("%d",&n);
    printf("input %d number of elements in the array: \n ");
    for(i=0;i<n;i++)
    {
        printf("element - %d:",i);
        scanf("%d",&a[i]);
    }
    printf("\n the values store into the array are: \n ");
    for(i=0;i<n;i++)
    {
        printf("% 5d",a[i]);
    }
    printf("\n\n the values store into the array in the reverse order: \n");
    for(i=n-1;i>=0;i--)
    {
        printf("% 5d",a[i]);
    }
    printf("\n\n");
}
```

"C:\Users\Rudra\Music\ass 7.exe"

```
the number of element store in the array: 5
input 446364160 number of elements in the array:
 element - 0:1
element - 1:7
element - 2:9
element - 3:8
element - 4:6

the values store into the array are:
    1   7   9   8   6

the values store into the array in the reverse order:
    6   8   9   7   1
```

Logs & others

Code::Blocks X   Search results X   Cccc

File   Line   Message
                  === Build file: "no targe
                  === Build finished: 0 err

maino : int

Start here X   3.c X

```c
#include <stdio.h>
int main()
{
    int arr[50],i,pos,n;
        printf("enter the size of array : ");
        scanf("%d", &n);
        printf("enter %d elements in the array in ascending order:\n",n);
        for(i=0;i<n;i++)
        {
            printf("element - %d : ",i);
            scanf("%d",&arr[i]);
        }
    printf("\nenter the position where to delete: ");
    scanf("%d",&pos);
    i=0;
    while(i!=pos-1)
            i++;
    while(i<n){
            arr[i]=arr[i+1];
            i++;
    }
    n--;
    printf("\n the new list is : ");
    for(i=0;i<n;i++)
        {
            printf("  %d",arr[i]);
        }
        printf("\n\n");
        return 0;
}
```

```
C:\Users\Rudra\Music\3.exe

enter the size of array : 5
enter 5 elements in the array in ascending order:
element - 0 : 1
element - 1 : 2
element - 2 : 3
element - 3 : 4
element - 4 : 8

enter the position where to delete: 8

 the new list is :   1 2 3 4

Process returned 0 (0x0)   execution time : 24.674 s
Press any key to continue.
```

```c
     scanf("%d",&c);
     printf("enter the first matrix element=\n");
     for(i=0;i<r;i++)
     {
     for(j=0;j<c;j++)
     {
     scanf("%d",&a[i][j]);
     }
     }
     printf("enter the second matrix element=\n");
     for(i=0;i<r;i++)
     {
     for(j=0;j<c;j++)
     {
     scanf("%d",&b[i][j]);
     }
     }
     printf("multiply of the matrix=\n");
     for(i=0;i<r;i++)
     {
     for(j=0;j<c;j++)
     {
     mul[i][j]=0;
     for(k=0;k<c;k++)
     {
     mul[i][j]+=a[i][k]*b[k][j];
     }
     }
     for(i=0;i<r;i++)
     {
     for(j=0;j<c;j++)
     {
     printf("%d\t",mul[i][j]);
     }
     printf("\n");
     }
     return 0;
```

C:\Users\Rudra\Music\3.exe

```
enter the number of row=2
enter the number of column=2
enter the first matrix element=
1 4
2 4
enter the second matrix element=
2 5
6 3
multiply of the matrix=
26       17
28       22

Process returned 0 (0x0)    execution time : 27.608 s
Press any key to continue.
```

```
main() : int
```

He X 3c X

```c
1    #include<stdio.h>
2    int main()
3    {
4        int arr[50],i,j,size,count=0;
5        printf("size of the array : ");
6        scanf("%d",&size);
7        printf("enter elements in array : ");
8        for(i=0;i<size;i++)
9        {
10           scanf("%d",&arr[i]);
11       }
12       for(i=0;i<size;i++)
13       {
14           for(j=i+1;j<size;j++)
15           {
16               if(arr[i]==arr[j])
17               {
18                   count++;
19                   break;
20               }
21           }
22       }
23       printf("\n total number of duplicate elements found in array = %d",count);
24   }
25
```

```
C:\Users\Rudra\Music\.exe

size of the array : 5
enter elements in array : 1 2 1 8 1

 total number of duplicate elements found in array = 
Process returned 0 (0x0)    execution time : 39.406 s
Press any key to continue.
```

CodeBlocks X   Search results X   Cccc X   Build log X   Build messages X   CppCheck/Vera++ X   CppCheck/Vera++ messages X   Cscope X   Debugger X   Dos

Line   Text

```c
#include <stdio.h>
int main()
{
    int a[20][20], transpose[10][10], r, c, i, j;
    printf("Enter rows and columns: ");
    scanf("%d %d", &r, &c);
    printf("\nEnter matrix elements:\n");
    for (i = 0; i < r; ++i)
        for (j = 0; j < c; ++j)
        {
            printf("Enter element a%d%d: ", i + 1, j + 1);
            scanf("%d", &a[i][j]);
        }
    printf("\nEntered matrix: \n");
    for (i = 0; i < r; ++i)
        for (j = 0; j < c; ++j)
        {
            printf("%d  ", a[i][j]);
            if (j == c - 1)
                printf("\n");
        }
    for (i = 0; i < r; ++i)
        for (j = 0; j < c; ++j)
        {
            transpose[j][i] = a[i][j];
        }
    printf("\nTranspose of the matrix:\n");
    for (i = 0; i < c; ++i)
        for (j = 0; j < r; ++j) {
            printf("%d  ", transpose[i][j]);
            if (j == r - 1)
                printf("\n");
        }
    return 0;
}
```

```
C:\Users\Rudra\Music\3.exe

Enter rows and columns: 2
3

Enter matrix elements:
Enter element a11: 1
Enter element a12: 9
Enter element a13: -7
Enter element a21: 4
Enter element a22: 9
Enter element a23: -3

Entered matrix:
1  9  -7
4  9  -3

Transpose of the matrix:
1  4
9  9
-7  -3

Process returned 0 (0x0)    execution time :
Press any key to continue.
```

```c
#include<stdio.h>
void main()
{
    int arr1[50],arr2[100],n,i;
    printf("the number of element store in the array: ");
    scanf("%d",&n);
    printf("input %d number of elements in the array: \n" ,n);
    for(i=0;i<n;i++)
    {
        printf("element - %d:",i);
        scanf("%d",&arr1[i]);
    }
    for(i=0;i<n;i++)
    {
        arr2[i]=arr1[i];
    }
    printf("the elements stored in the  first array are: \n");
    for(i=0;i<n;i++)
    {
        printf("% 5d",arr1[i]);
    }
    printf(" \n the elements into the second array are: \n");
    for(i=0;i<n;i++)
    {
        printf("% 5d",arr2[i]);
    }
    printf("\n\n");
}
```

"C:\Users\Rudra\Music\ass 7.exe"

```
the number of element store in the array: 4
input 4 number of elements in the array:
element - 0:3
element - 1:5
element - 2:7
element - 3:0
the elements stored in the  first array are:
    3    5    7    0
the elements into the second array are:
    3    5    7    0

Process returned 0 (0x0)   execution time : 9.875
Press any key to continue.
```

& others

Code::Blocks X   Search results X   Cccc X   Build log X   Build messages X   Cp

Line   Message
=== Build file: "no target" in "no project" (compiler: unknown) ===
=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(

main() : int

```c
5      for (count = 0; count <= n; count++)
6      {
7          if (i == n)
8          {
9              m1 = m2;
10             m2 = ar2[0];
11             break;
12         }
13         else if (j == n)
14         {
15             m1 = m2;
16             m2 = ar1[0];
17             break;
18         }
19         if (ar1[i] < ar2[j])
20         {
21             m1 = m2;
22             m2 = ar1[i];
23             i++;
24         }
25         else
26         {
27             m1 = m2;
28             m2 = ar2[j];
29             j++;
30         }
31     }
32     return (m1 + m2)/2;
33  }
34  int main()
35  {
36      int ar1[] = {1, 14, 19, 25, 28};
37      int ar2[] = {3, 17, 19, 31, 46};
38      int n1 = sizeof(ar1)/sizeof(ar1[0]);
39      int n2 = sizeof(ar2)/sizeof(ar2[0]);
40      if (n1 == n2)
41          printf("Median is %d", getMedian(ar1, ar2, n1));
42      else
```

C:\Users\Rudra\Music\0.exe

Median is 18_

```c
#include <stdio.h>
int search(int mat[][3], int n, int x)
{
    if (n == 0)
        return -1;
    int smallest = mat[0][0], largest = mat[n - 1][n - 1];
    if (x < smallest || x > largest)
        return -1;
    int i = 0, j = n - 1;
    while (i < n && j >= 0)
    {
        if (mat[i][j] == x)
        {
            printf("\n Found at %d, %d", i, j);
            return 1;
        }
        if (mat[i][j] > x)
            j--;
        else
            i++;
    }
    printf("n Element not found");
    return 0;
}
int main()
{
    int mat[2][2] = {
        { 11, 10, },
        { 36, 47 },
    };
    search(mat, 2, 36);
    return 0;
}
```

Found at 1, 0
Process returned 0 (0x0)   execution time : 0.052 s
Press any key to continue.