**Set program in c**

**1] common number in Array?**

# include<stdio.h>

void main()

{

int arr1[]={1,2,5,4,9,17,13,6};

int arr2[]={2,4,6,7,10,12,19,13,17};

int l=sizeof(arr1);

int s=sizeof(arr2);

int k=sizeof(int);

int arr3[k];

int counter=0;

printf("\nsize of array 1 is=%d",l/k);

printf("\nsize of array 2 is=%d",s/k);

for(int i=0;i<sizeof(arr1)/k;i++)

{

for(int j=0;j<sizeof(arr2)/k;j++)

{

if(arr1[i]==arr2[j])

{

arr3[counter]=arr1[i];

counter++;

}

}

}

for(int p=0;p<k;p++)

{

printf("\n common number arr %d",arr3[p]);

}

}

Output:-

size of array 1 is=8

size of array 2 is=9

common number arr 2

common number arr 4

common number arr 17

common number arr 13

**2]Odd number in Array?**

# include<stdio.h>

void main()

{

int size;

printf("Enter your size of array ");

scanf("%d",&size);

int arr[size];

for(int i=0;i<size;i++)

{

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

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

}

for(int j=0;j<size;j++)

{

if(arr[j]%2!=0)

{

printf("\n%d is odd",arr[j]);

}

printf("",arr[j]);

}

}

**Output:-**

Enter your size of array 10

enter your 1 element of 1

enter your 2 element of 2

enter your 3 element of 3

enter your 4 element of 4

enter your 5 element of 5

enter your 6 element of 6

enter your 7 element of 7

enter your 8 element of 8

enter your 9 element of 9

enter your 10 element of 10

1 is odd

3 is odd

5 is odd

7 is odd

9 is odd

**3]Array in even number?**

# include<stdio.h>

void main()

{

int size;

printf("Enter your size of array ");

scanf("%d",&size);

int arr[size];

for(int i=0;i<size;i++)

{

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

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

}

for(int j=0;j<size;j++)

{

if(arr[j]%2==0)

{

printf("\n%d is even",arr[j]);

}

printf("",arr[j]);

}

}

**Output:-**

Enter your size of array 10

enter your 1 element of 2

enter your 2 element of 3

enter your 3 element of 6

enter your 4 element of 5

enter your 5 element of 4

enter your 6 element of 9

enter your 7 element of 8

enter your 8 element of 75

enter your 9 element of 12

enter your 10 element of 65

2 is even

6 is even

4 is even

8 is even

12 is even

**4] Nigetive number in Array?**

# include<stdio.h>

void main()

{

int size;

int count=-1;

printf("Enter your size of array ");

scanf("%d",&size);

int arr[size];

for(int i=0;i<size;i++)

{

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

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

}

for(int j=0;j<size;j++)

{

if(arr[j]<0)

{

printf("\n%d is nigetive number ",arr[j]);

count--;

}

printf("",arr[j]);

}

}

**Output:-**

Enter your size of array 5

enter your 1 element of -6

enter your 2 element of 9

enter your 3 element of 8

enter your 4 element of -1

enter your 5 element of 0

-6 is nigetive number

-1 is nigetive number

**5]Positive number in Array?**

# include<stdio.h>

void main()

{

int size;

int count=-1;

printf("Enter your size of array ");

scanf("%d",&size);

int arr[size];

for(int i=0;i<size;i++)

{

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

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

}

for(int j=0;j<size;j++)

{

if(arr[j]>0)

{

printf("\n%d is positive number ",arr[j]);

count--;

}

printf("",arr[j]);

}

}

**Output:-**

Enter your size of array 3

enter your 1 element of -2

enter your 2 element of 45

enter your 3 element of -10

45 is positive number

**6] disending Number in Array?**

# include<stdio.h>

void main()

{

int arr[5];

for(int i=1;i<=5;i++)

{

printf("Enter your %d element ",i);

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

}

int count;

for(int i=1;i<=5;i++)

{

for(int j=i+1;j<=5;j++)

{

if(arr[i]<arr[j])

{

count=arr[i];

arr[i]=arr[j];

arr[j]=count;

}

}

}

for(int k=1;k<=5;k++)

{

printf(" %d",arr[k]);

}

}

**Output:-**

Enter your 1 element 5

Enter your 2 element 3

Enter your 3 element 6

Enter your 4 element 2

Enter your 5 element 4

6 5 4 3 2

**7] assinding number in Array?**

# include<stdio.h>

void main()

{

int arr[5];

for(int i=1;i<=5;i++)

{

printf("Enter your %d element ",i);

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

}

int count;

for(int i=1;i<=5;i++)

{

for(int j=i+1;j<=5;j++)

{

if(arr[i]>arr[j])

{

count=arr[i];

arr[i]=arr[j];

arr[j]=count;

}

}

}

for(int k=1;k<=5;k++)

{

printf(" %d",arr[k]);

}

}

**Output:-**

Enter your 1 element 6

Enter your 2 element 5

Enter your 3 element 1

Enter your 4 element 4

Enter your 5 element 3

1 3 4 5 6

**8]gretest number in Array?**

# include<stdio.h>

void main()

{

int arr1[]={2,3,5,66,78,13,24,57,80,2};

int l=sizeof(arr1);

int s=sizeof(int);

printf("\nsize of array1 is %d ",l/s);

for(int i=0;i<sizeof(arr1)/s;i++)

{

for(int j=0;j<sizeof(arr1)/s;j++)

{

if(arr1[i]>arr1[j])

{

arr1[0]=arr1[i];

}

}

}

printf("\ngretest number is %d",arr1[0]);

}

**Output:-**

size of array1 is 10

gretest number is 80

**9] smallest number in Array?**

# include<stdio.h>

void main()

{

int arr1[]={12,3,5,66,78,13,24,57,80,2};

int l=sizeof(arr1);

int s=sizeof(int);

printf("\nsize of array1 is %d ",l/s);

for(int i=0;i<sizeof(arr1)/s;i++)

{

for(int j=0;j<sizeof(arr1)/s;j++)

{

if(arr1[i]<arr1[j])

{

arr1[0]=arr1[i];

}

}

}

printf("\nsmallest number is %d",arr1[0]);

}

**Output:-**

size of array1 is 10

smallest number is 2

**10] Array is sum?**

#include<stdio.h>

void main()

{

int size,sum;

printf("enter the size of array");

scanf("%d",&size);

int arr[size];

for(int i=0;i<size;i++)

{

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

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

}

for(int j=0;j<size;j++)

{

sum=sum+arr[j];

}

printf("\n %d",sum);

}

**Output:-**

enter the size of array 5

enter the of 1 element 1

enter the of 2 element 2

enter the of 3 element 3

enter the of 4 element 4

enter the of 5 element 5

sum = 15

**MATRIX PROGRAM IN C**

**11]sum row in array ?**

#include<stdio.h>

void main()

{

int arr[3][3]={1,2,3,4,5,6,7,8,9};

int i,j,sum=0;

for(i=0;i<3;i++)

{

sum=0;

for(j=0;j<3;j++)

{

sum=arr[i][j]+sum;

}

printf("sumrow = %d\n",sum);

}

}

**Output:-**

sumrow = 6

sumrow = 15

sumrow = 24

12] sum columan in array ?

#include<stdio.h>

void main()

{

int arr[3][3]={1,2,3,4,5,6,7,8,9};

int i,j,sum=0;

for(i=0;i<3;i++)

{

sum=0;

for(j=0;j<3;j++)

{

sum=arr[i][j]+sum;

}

}

for(i=0;i<3;i++)

{

sum=0;

for(j=0;j<3;j++)

{

sum=arr[j][i]+sum;

}

printf("sum column = %d\n",sum);

}

}

Output:-

sum column = 12

sum column = 15

sum column = 18

13]Array in column substarction ?

#include<stdio.h>

void main()

{

int arr[3][3]={1,2,3,4,5,6,7,8,9};

int i,j,sub=0;

for(i=0;i<3;i++)

{

sub=0;

for(j=0;j<3;j++)

{

sub=arr[i][j]-sub;

}

}

for(i=0;i<3;i++)

{

sub=0;

for(j=0;j<3;j++)

{

sub=arr[j][i]-sub;

}

printf("sub column = %d\n",sub);

}

}

Output:-

sum column = 4

sum column = 5

sum column = 6

14] row in substraction Array?

#include<stdio.h>

void main()

{

int arr[3][3]={1,2,3,4,5,6,7,8,9};

int i,j,sub=0;

for(i=0;i<3;i++)

{

sub=0;

for(j=0;j<3;j++)

{

sub=arr[i][j]-sub;

}

printf("sub row = %d\n",sub);

}

}

Output:-

sub row = 2

sub row = 5

sub row = 8

15] multiple in Array row?

#include<stdio.h>

void main()

{

int arr[3][3]={1,2,3,4,5,6,7,8,9};

int i,j,multi;

for(i=0;i<3;i++)

{

multi=1;

for(j=0;j<3;j++)

{

multi=arr[i][j]\*multi;

}

printf("multiple row = %d\n",multi);

}

}

Output:-

multiple row = 6

multiple row = 120

multiple row = 504

16] multiple in Array column?

#include<stdio.h>

void main()

{

int arr[3][3]={1,2,3,4,5,6,7,8,9};

int i,j,multi;

for(i=0;i<3;i++)

{

multi=1;

for(j=0;j<3;j++)

{

multi=arr[i][j]\*multi;

}

}

for(i=0;i<3;i++)

{

multi=1;

for(j=0;j<3;j++)

{

multi=arr[j][i]\*multi;

}

printf("multiple cloumn = %d\n",multi);

}

}

Output:-

multiple cloumn = 28

multiple cloumn = 80

multiple cloumn = 162