Date- 25-jan-2020

WAP TO PRINT SECOND NON-REPEATING NUMBER

\*/

#include<stdio.h>

void main()

{ int n,i,j,c=0,m=0;

printf("enter the size of array ");

scanf("%d",&n);

int a[n],b[m];

printf("enter the elements ");

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

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

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

{c=0;

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

{

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

{

c++;

}

}

if(c==1)

{

b[m]=a[i];

m++;

}

}

printf("second element is %d",b[1]);

}

OUTPUT

enter the size of array 5

enter the elements 2 3 2 4 5

second element is 4

Date- 25-jan-2020

WAP TO REVERSE AN ARRAY USING SWAPPING \*/

#include<stdio.h>

int main()

{

int arr[100],n,i,temp,end;

printf("enter the size of array");

scanf("%d",&n);

end=n-1;

printf("enter the value of array");

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

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

}

for(i=0; i<n/2; i++)

{

temp=arr[i];

arr[i]=arr[end];

arr[end]=temp;

end--;

}

printf("Reverse array element are:\n");

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

{

printf("%d\t",arr[i]);

}

}

OUTPUT

enter the size of array 6

enter the value of array 3 4 5 78 90 9

Reverse array element are:

9 90 78 5 4 3

Date- 25-jan-2020

WAP TO FIND COMMON ELEMENTS IN A ARRAY

#include <stdio.h>

int main()

{int n;

puts("Enter Array Size\n");

scanf("%d",&n);

int a[n];

puts("Enter Array \n");

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

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

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

{

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

{

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

printf("\n Common elements is %d",a[j]);

}

}

return 0;

}

OUTPUT

Enter Array Size

6

Enter Array

1 2 3 1 2 4

Common elements is 1

Common elements is 2

Date- 03-feb-2020

WAP TO MULTIPLY TWO MATRICES

#include<stdio.h>

void main()

{

int m,n,p,q,i,j,k,sum=0,a[10][10],b[10][10],c[10][10];

printf("Enter number of row and column of first matrix\n");

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

printf("enter the elements of first matrix\n");

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

{

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

{

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

}

}

printf("Enter number of rows and columns of second matrix\n");

scanf("%d%d",&p,&q);

if(n!=p)

printf("The multiplication is not possible:\n");

else

{

printf("Enter elements of second matrix:\n");

}

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

{

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

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

}

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

{

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

{

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

sum=sum+a[i][k]\*b[k][j];

c[i][j]=sum;

sum=0;

}

}

printf("product of the matrices:\n");

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

{

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

{

printf("%d\t",c[i][j]);

}

printf("\n");}}

OUTPUT

Enter number of row and column of first matrix

2 3

enter the elements of first matrix

1 2 3

4 5 6

Enter number of rows and columns of second matrix

3 2

Enter elements of second matrix:

3 2

1 2

3 4

product of the matrices:

14 18

35 42

Date- 03-feb-2020

\*/WAP TO FIND TRANSPOSE OF A MATRIX

#include <stdio.h>

int main()

{

int a[5][5],t[5][5],i,j,m,n;

printf("\n ENTER ROWS AND COLUMNS");

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

printf("ENTER A MATRIX");

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

{

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

{

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

}

}

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

{

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

{

t[i][j]=a[j][i];

}

}

printf("transpose of matrix\n");

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

{

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

{

printf("%d\t",t[i][j]);

}

printf("\n");

}

return 0;

}

OUTPUT

ENTER ROWS AND COLUMNS

3

3

ENTER A MATRIX

3 4 5

7 8 9

4 5 8

transpose of matrix

3 7 4

4 8 5

5 9 8

Date- 03-feb-2020

WAP TO INTERCHANGE THE MAXIMUM AND MINIMUM ELEMENTS OF A ARRAY

#include<stdio.h>

int main()

{

int a[100],max,min,i,maxpos,minpos,temp,n;

printf("enter the size of array ");

scanf("%d",&n);

printf("enter the value of array ");

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

{

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

}

max=a[0];

min=a[0];

maxpos=0;

minpos=0;

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

{

if(a[i]>max)

{

max=a[i];

maxpos=i;

}

if(a[i]<min)

{

min=a[i];

minpos=i;

}

}

temp=a[maxpos];

a[maxpos]=a[minpos];

a[minpos]=temp;

printf("After interchange array elemnts are: ");

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

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

getch();

}

OUTPUT

enter the size of array 6

enter the value of array 1 2 3 5 6 4

After interchange array elemnts are: 6 2 3 5 1 4

Date- 10-feb-2020  
WAP TO FIND OCCURRENCE OF A NUMBER IN A ARRAY

#include<stdio.h>

int main()

{

int a[100],n,i,num,count=0;

printf("Enter number of element ");

scanf("%d",&n);

printf("\n enter value of element\t");

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

{

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

}

printf("enter occurence elements of array");

scanf("%d",&num);

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

{

if(a[i]==num)

count++;

}

printf("occurence of number this %d are in %d times",num,count);

return 0;

}

OUTPUT

Enter number of element 6

enter value of element 4 5 6 4 5 7

enter occurence elements of array 4

occurence of number this 4 are in 2 times

Date- 10-feb-2020

WAP TO DISPLAY FIBONACCI SERIES USING RECURSION

#include <stdio.h>

int fibo(int n)

{

if(n==0||n==1)

return(n);

else

return(fibo(n-1)+fibo(n-2));

}

int main()

{

int i,n,m=0;

printf("Enter a number ");

scanf("%d",&n);

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

{

printf("%d\t",fibo(m));

m++;

}

return 0;

}

OUTPUT

Enter a number 7

0 1 1 2 3 5 8

Date- 10-feb-2020

WAP TO FIND FACTORIAL OF A NUMBER USING RECURSION

#include <stdio.h>

int fact(int n)

{

if(n>=1)

return(n\*fact(n-1));

else

return(1);

}

int main()

{

int n;

printf("enter a number ");

scanf("%d",&n);

printf("Factorial is %d",fact(n));

return 0;

}

OUTPUT

enter a number

Factorial is 720

Date- 17-feb-2020

WAP TO FIND GCD OF A NUMBER USING RECURSION

#include <stdio.h>

int hcf(int n1,int n2)

{

if(n2!=0)

return hcf(n2,n1%n2);

else

return(n1);

}

int main()

{

int n1,n2;

printf("\n enter two numbers ");

scanf("%d%d",&n1,&n2);

printf("GCD is %d",hcf(n1,n2));

return 0;

}

OUTPUT

enter two numbers 12

14

GCD is 2