**11. EXECUTE A GIVEN PROGRAM TO DISPLAY GIVEN ELEMENTS USING 1D ARRAY**

#include<stdio.h>

int main(){

int i=0;

int marks[5]={20,30,40,50,60};

for(i=0;i<5;i++)

{

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

}

return 0;

}

**12.EXECUTE A C PROGRAM TO DISPLAY A SET OF NUMBERS USING 1D ARRAY**

#include*<stdio.h>*

int main()

{

int arr[5], i;

**for**(i = 0; i < 5; i++)

{

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

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

}

printf("**\n**Printing elements of the array: **\n\n**");

**for**(i = 0; i < 5; i++)

{

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

}

**return** 0;

}

**13. EXECUTE A C PROGRAM TO DISPLAY A MATRIX USING 2D ARRAY**

#include<stdio.h>

**int** main()

{

**int** i=0,j=0;

**int** arr[4][3]={{1,2,3},{2,3,4},{3,4,5},{4,5,6}};

**for**(i=0;i<4;i++)

{

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

{

   printf("arr[%d] [%d] = %d \n",i,j,arr[i][j]);

 }

}

**return** 0;

}

**14. EXECUTE A C PROGRAM TO DISPLAY ADDITON OF MATRICES USIND 2D ARRAY**

#include <stdio.h>

void main()

{

int m,n,c,d,first[10][10],second[10][10],sum[10][10];

printf("enter th number of rows and columns of matrix \n");

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

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

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

{

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

{

scanf("%d",&first[c][d]);

}

}

printf("enter th values of scond matrix \n");

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

{

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

{

scanf("%d",&second[c][d]);

}

}

printf("sum of the entered matrices \n");

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

{

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

{

sum[c][d]=first[c][d]+second[c][d];

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

}

printf("\n");

}

}

**15. EXECUTE A PROGRAM TO DISPLAY MULTIPICATION OF MATRICES USINGB 2D ARRAY**

#include<stdio.h>

void main()

{

int m,n,p,q,c,d,k,sum=0;

int first[10][10],second[10][10],multiply[10][10];

printf("enter the number of rows and cloumns of first\n");

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

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

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

{

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

{

scanf("%d",&first[c][d]);

}

}

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

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

if(n!=p)

{

printf("matrices can't be multipled with each other\n");

}

else

{

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

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

{

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

{

scanf("%d",&second[c][d]);

}

}

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

{

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

{

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

{

sum=sum+first[c][k]\*second[k][d];

}

multiply[c][d]=sum;

sum=0;

}

}

printf("product of matrices\n");

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

{

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

{

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

printf("\n");

}

}

}

}

**16. EXECUTE A PROGRAM TO DISPLAY TRANSPOSE OF MATRIX USING 2D ARRAY**

#include<stdio.h>

void main()

{

int m,n,c,d,matrix[10][10],transpose[10][10];

printf("enter the rows and columns of matrix\n");

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

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

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

{

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

{

scanf("%d",&matrix[c][d]);

}

}

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

print("transpose of matrix\n");

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

{

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

{

printf("%d\t",transpose [c][d];

}

printf("\n");

}

}

**17. EXECUTE A C PROGRAM TO DISPLAY LINEAR SEARCH USING 1D ARRAY**

#include <stdio.h>

int main()

{

int a[10], i, item,n;

printf("\nEnter number of elements of an array:\n");

scanf("%d",&n);

printf("\nEnter elements: \n");

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

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

printf("\nEnter item to search: ");

scanf("%d", &item);

for (i=0; i<=9; i++)

if (item == a[i])

{

printf("\nItem found at location %d", i+1);

break;

}

if (i > 9)

printf("\nItem does not exist.");

return 0;

}

**18 . EXECUTE A C PROGRAM TO DISPLAY BUBBLE SORT USING 1D ARRAY**

#include<stdio.h>

**int** main()

{

**int** array[100], n, i, j, swap;

printf("Enter number of elementsn");

scanf("%d", &n);

printf("Enter %d Numbers:n", n);

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

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

**for**(i = 0 ; i < n - 1; i++)

{

**for**(j = 0 ; j < n-i-1; j++)

{

**if**(array[j] > array[j+1])

{

swap=array[j];

array[j]=array[j+1];

array[j+1]=swap;

}

}

}

printf("Sorted Array:n");

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

printf("%dn", array[i]);

**return** 0;

}

**19.EXECUTE A C PROGRAM TO DISPLAY ARITHMETIC OPERATORS USING FUNCTIONS WITH ARGUMENTS AND WITH RETURN VALUE**

#include<stdio.h>

#include<conio.h>

int add(int n1, int n2);

int subtract(int n1, int n2);

int multiply(int n1, int n2);

int divide(int n1, int n2);

int main()

{

int num1, num2;

printf("Enter two numbers: ");

scanf("%d %d", &num1, &num2);

printf("%d + %d = %d\n", num1, num2, add(num1, num2));

printf("%d - %d = %d\n", num1, num2, subtract(num1, num2));

printf("%d \* %d = %d\n", num1, num2, multiply(num1, num2));

printf("%d / %d = %d\n", num1, num2, divide(num1, num2));

return 0;

}

int add(int n1, int n2)

{

int result;

result = n1 + n2;

return result;

}

int subtract(int n1, int n2)

{

int result;

result = n1 - n2;

return result;

}

int multiply(int n1, int n2)

{

int result;

result = n1 \* n2;

return result;

}

int divide(int n1, int n2)

{

int result;

result = n1 / n2;

return result;

}

**20. EXECUTE A C PROGRAM TO DISPLAY ARITHEMTIC OPERATORS USING FUNCTIONS WITHOUT ARGUMENTS AND WITHOUT RETURN VALUE**

ARITHEMTIC OPERATORS

#include<stdio.h>

#include<conio.h>

void sum();

void sub();

void product();

void division();

void main()

{

sum ();

sub();

product();

division();

getch();

}

void sum ()

{

int a,b;

printf ("enter the two integers");

scanf ("%d%d",&a,&b);

printf ("the sum of the numbers you entered is %d",a+b);

}

void sub ()

{

int a,b;

printf ("enter the two integers");

scanf ("%d%d",&a,&b);

printf ("the sub of the numbers you entered is %d",a-b);

}

void product ()

{

int a,b;

printf ("enter the two integers");

scanf ("%d%d",&a,&b);

printf ("the product of the numbers you entered is %d",a\*b);

}

void division ()

{

int a,b;

printf ("enter the two integers");

scanf ("%d%d",&a,&b);

printf ("the division of the numbers you entered is %d",a/b);

}