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#include<stdio.h>

int display(int marks[]);

int main()

{

int marks[5] = {99, 90, 96, 93, 95};

display(marks);

}

int display(int marks[])

{

int i;

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

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

}

}

\*/

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#include<stdio.h>

int linear(int a[] ,int n ,int key);

int main()

{

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

printf("How many elements?");

scanf("%d",&n);

printf("Enter array elements:n\n");

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

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

printf("Enter element to search:\n");

scanf("%d",&key);

linear(a,n,key);

}

int linear(int a[],int n,int key)

{

int i;

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

if(a[i]==key)

break;

if(i<n)

printf("Element found at index %d",i);

else

printf("Element not found");

return 0;

}

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#include<stdio.h>

int square(int);

int main()

{

int num, res;

printf("Enter a number\n");

scanf("%d", &num);

res=square(num);

printf("Square of %d = %d", num, res);

}

int square(int x)

{

return (x\*x);

}

\*/

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#include <stdio.h>

#include <math.h>

long decimalToBinary(int decimalnum)

{

long binarynum = 0;

int rem, temp = 1;

while (decimalnum!=0)

{

rem = decimalnum%2;

decimalnum = decimalnum / 2;

binarynum = binarynum + rem\*temp;

temp = temp \* 10;

}

\*/

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#include <stdio.h>

int findMax(int arr[], int n) {

int max = arr[0];

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

if (arr[i] > max)

max = arr[i];

}

return max;

}

int main() {

int n;

printf("Enter the number of elements in the array: ");

scanf("%d", &n);

int arr[n];

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

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

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

}

int max = findMax(arr, n);

printf("The maximum element in the array is: %d\n", max);

return 0;

}

\*/

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#include <stdio.h>

void addMatrices(int first[][10], int second[][10], int result[][10], int rows, int cols) {

for (int i = 0; i < rows; i++) {

for (int j = 0; j < cols; j++) {

result[i][j] = first[i][j] + second[i][j];

}

}

}

int main() {

int rows, cols;

printf("Enter the number of rows: ");

scanf("%d", &rows);

printf("Enter the number of columns: ");

scanf("%d", &cols);

int first[rows][cols], second[rows][cols], result[rows][cols];

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

for (int i = 0; i < rows; i++) {

for (int j = 0; j < cols; j++) {

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

}

}

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

for (int i = 0; i < rows; i++) {

for (int j = 0; j < cols; j++) {

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

}

}

addMatrices(first, second, result, rows, cols);

printf("Resulting matrix after addition:\n");

for (int i = 0; i < rows; i++) {

for (int j = 0; j < cols; j++) {

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

}

printf("\n");

}

return 0;

}

\*/

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#include <stdio.h>

void rowSum(int arr[][10], int rows, int cols) {

printf("Row sums:\n");

for (int i = 0; i < rows; i++) {

int sum = 0;

for (int j = 0; j < cols; j++) {

sum += arr[i][j];

}

printf("Sum of row %d: %d\n", i + 1, sum);

}

}

void columnSum(int arr[][10], int rows, int cols) {

printf("Column sums:\n");

for (int j = 0; j < cols; j++) {

int sum = 0;

for (int i = 0; i < rows; i++) {

sum += arr[i][j];

}

printf("Sum of column %d: %d\n", j + 1, sum);

}

}

int main() {

int rows, cols;

printf("Enter the number of rows: ");

scanf("%d", &rows);

printf("Enter the number of columns: ");

scanf("%d", &cols);

int arr[rows][cols];

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

for (int i = 0; i < rows; i++) {

for (int j = 0; j < cols; j++) {

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

}

}

rowSum(arr, rows, cols);

columnSum(arr, rows, cols);

return 0;

}

\*/

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#include <stdio.h>

void bubbleSort(int arr[], int n) {

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

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

if (arr[j] > arr[j + 1]) {

int temp = arr[j];

arr[j] = arr[j + 1];

arr[j + 1] = temp;

}

}

}

}

void selectionSort(int arr[], int n) {

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

int minIndex = i;

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

if (arr[j] < arr[minIndex]) {

minIndex = j;

}

}

int temp = arr[minIndex];

arr[minIndex] = arr[i];

arr[i] = temp;

}

}

void insertionSort(int arr[], int n) {

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

int key = arr[i];

int j = i - 1;

while (j >= 0 && arr[j] > key) {

arr[j + 1] = arr[j];

j = j - 1;

}

arr[j + 1] = key;

}

}

void printArray(int arr[], int n) {

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

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

}

printf("\n");

}

int main() {

int n;

printf("Enter the number of elements: ");

scanf("%d", &n);

int arr[n];

printf("Enter the elements:\n");

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

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

}

int arr1[n];

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

arr1[i] = arr[i];

}

bubbleSort(arr1, n);

printf("Array after Bubble Sort: ");

printArray(arr1, n);

int arr2[n];

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

arr2[i] = arr[i];

}

selectionSort(arr2, n);

printf("Array after Selection Sort: ");

printArray(arr2, n);

int arr3[n];

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

arr3[i] = arr[i];

}

insertionSort(arr3, n);

printf("Array after Insertion Sort: ");

printArray(arr3, n);

return 0;

}

\*/

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#include<stdio.h>

float findAverage(int marks[]);

int printarray(int marks[]);

int main()

{

float avg;

int marks[5] = {99, 90, 96, 93, 95};

printarray(marks);

printf("program done\n");

}

int printarray(int marks[])

{

int i;

float avg;

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

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

avg=findAverage(marks);

printf("Average marks = %.1f", avg);

printf("average done\n");

}

float findAverage(int marks[])

{

int i;

float sum = 0;

float avg;

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

sum += marks[i];

}

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

avg = (sum / 5);

return avg;

}

\*/

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#include<stdio.h>

int find\_factorial(int n);

int main()

{

int num, fact;

printf("\nEnter any integer number:");

scanf("%d",&num); //5

fact =find\_factorial(num);

printf("\n factorial of %d is: %d",num, fact);

}

int find\_factorial(int n)

{

if (n==0)

return(1);

}

\*/

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#include<stdio.h>

int main()

{

int n, i;

printf("Enter the number of element you want in series :\n");

scanf("%d",&n);

printf("fibonacci series is : \n");

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

{

printf("%d ",fibonacci(i));

}

}

int fibonacci(int i)

{

if(i==0)

return 0;

else if(i==1)

return 1;

else

return (fibonacci(i-1)+fibonacci(i-2));

}

\*/

/\*

int fibonacci(int);

#include<stdio.h>

int main()

{

int n, i;

printf("Enter the number of element you want in series :\n");

scanf("%d",&n);

printf("fibonacci series is : \n");

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

{

printf("%d ",fibonacci(i));

}

}

int fibonacci(int i)

{

if(i==0)

return 0;

else if(i==1)

return 1;

else

return (fibonacci(i-1)+fibonacci(i-2));

}

\*/