arrays

1)

#include <stdio.h>

int main()

{

int Arr[100], n, i, sum = 0;

printf("Enter the number of elements you want to insert : ");

scanf("%d", &n);

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

{

printf("Enter element %d : ", i + 1);

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

sum += Arr[i];

}

printf("\nThe sum of the array is : %d", sum);

printf("\nThe average of the array is : %0.2f", (float)sum / n);

return 0;

}

2)

#include<stdio.h>

#include <conio.h>

int main()

{

int a[1000],i,n,min,max;

printf("Enter size of the array : ");

scanf("%d",&n);

printf("Enter elements in array : ");

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

{

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

}

min=max=a[0];

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

{

if(min>a[i])

min=a[i];

if(max<a[i])

max=a[i];

}

printf("minimum of array is : %d",min);

printf("\nmaximum of array is : %d",max);

return 0;

}

5)

#include <stdio.h>

int main ()

{

int n = 0, i = 0, largest1 = 0, largest2 = 0, temp = 0;

printf ("Enter the size of the array\n");

scanf ("%d", &n);

int array[n];

printf ("Enter the elements\n");

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

{

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

}

printf ("The array elements are : \n");

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

{

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

}

printf ("\n");

largest1 = array[0];

largest2 = array[1];

if (largest1 < largest2)

{

temp = largest1;

largest1 = largest2;

largest2 = temp;

}

for (int i = 2; i < n; i++)

{

if (array[i] > largest1)

{

largest2 = largest1;

largest1 = array[i];

}

else if (array[i] > largest2 && array[i] != largest1)

{

largest2 = array[i];

}

}

printf ("The FIRST LARGEST = %d\n", largest1);

printf ("THE SECOND LARGEST = %d\n", largest2);

return 0;

}

6)

#include <stdio.h>

void main()

{

int i, j, a, n, number[30];

printf("Enter the value of N \n");

scanf("%d", &n);

printf("Enter the numbers \n");

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

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

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

{

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

{

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

{

a = number[i];

number[i] = number[j];

number[j] = a;

}

}

}

printf("The numbers arranged in ascending order are given below \n");

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

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

}

7)

#include <stdio.h>

int main()

{

int n, a[100], b[100], count = 0, c, d;

printf("Enter number of elements in array\n");

scanf("%d", &n);

printf("Enter %d integers\n", n);

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

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

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

{

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

{

if(a[c] == b[d])

break;

}

if (d == count)

{

b[count] = a[c];

count++;

}

}

printf("Array obtained after removing duplicate elements:\n");

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

printf("%d\n", b[c]);

return 0;

}

8)

#include <bits/stdc++.h>

using namespace std;

int mostFrequent(int arr[], int n)

{

sort(arr, arr + n);

int max\_count = 1, res = arr[0], curr\_count = 1;

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

if (arr[i] == arr[i - 1])

curr\_count++;

else {

if (curr\_count > max\_count) {

max\_count = curr\_count;

res = arr[i - 1];

}

curr\_count = 1;

}

}

if (curr\_count > max\_count)

{

max\_count = curr\_count;

res = arr[n - 1];

}

return res;

}

int main()

{

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

int n = sizeof(arr) / sizeof(arr[0]);

cout << mostFrequent(arr, n);

return 0;

}

flow control statement

1)

#include <stdio.h>

int main()

{

int A;

printf("Enter the number A: ");

scanf("%d", &A);

if (A > 0)

printf("%d is positive.", A);

else if (A < 0)

printf("%d is negative.", A);

else if (A == 0)

printf("%d is zero.", A);

return 0;

}

2)

#include <stdio.h>

int main() {

int num;

printf("Enter an integer: ");

scanf("%d", &num);

// True if num is perfectly divisible by 2

if(num % 2 == 0)

printf("%d is even.", num);

else

printf("%d is odd.", num);

return 0;

}

10)

#include<stdio.h>

#include<conio.h>

void main()

{

int n;

clrscr();

printf("\n"); //for new line

// While Loop

n=1; //Initialize

while(n<=10) // Condition

{

printf(" %d",n);

n++; // Increment

}

getch();

}

12)

#include <stdio.h>

int main() {

int n, i, flag = 0;

printf("Enter a positive integer: ");

scanf("%d", &n);

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

// condition for non-prime

if (n % i == 0) {

flag = 1;

break;

}

}

if (n == 1) {

printf("1 is neither prime nor composite.");

}

else {

if (flag == 0)

printf("%d is a prime number.", n);

else

printf("%d is not a prime number.", n);

}

return 0;

}

13)

#include <stdio.h>

int main()

{

int i, Number, count;

printf(" Prime Number from 10 to 99 are: \n");

for(Number = 10; Number <= 99; Number++)

{

count = 0;

for (i = 2; i <= Number/2; i++)

{

if(Number%i == 0)

{

count++;

break;

}

}

if(count == 0 && Number != 1 )

{

printf(" %d ", Number);

}

}

return 0;

}

18)

class PalindromeExample{

public static void main(String args[]){

int r,sum=0,temp;

int n=454;//It is the number variable to be checked for palindrome

temp=n;

while(n>0){

r=n%10; //getting remainder

sum=(sum\*10)+r;

n=n/10;

}

if(temp==sum)

System.out.println("palindrome number ");

else

System.out.println("not palindrome");

}

language basics

1)

#include<stdio.h>

int main(int argc, char \*argv[])

{

int a, b, c;

if (argc < 4 || argc > 5)

{

printf("enter 4 arguments only eg.\"filename arg1 arg2 arg3!!\"");

return 0;

}

a = atoi(argv[1]);

b = atoi(argv[2]);

c = atoi(argv[3]);

if (a < 0 || b < 0 || c < 0)

{

printf("enter only positive values in arguments !!");

return 1;

}

if (!(a != b && b != c && a != c))

{

printf("please enter three different value ");

return 1;

}

else

{

if (a > b && a > c)

printf("%d is largest", a);

else if (b > c && b > a)

printf ("%d is largest", b);

else if (c > a && c > b)

printf("%d is largest ",c);

}

return 0;

}

}

3)

#include <stdio.h>

int main(int argc, char \*argv[])

{

int a,b,sum;

if(argc!=3)

{

printf("please use \"prg\_name value1 value2 \"\n");

return -1;

}

a = atoi(argv[1]);

b = atoi(argv[2]);

sum = a+b;

printf("Sum of %d, %d is: %d\n",a,b,sum);

return 0;

}

classes and objects

1)

public class Box {

double h,w,d;

Box(double width,double height,double depth)

{

h=height;

w=width;

d=depth;

}

double volume()

{ double v;

v=h\*w\*d;

return v;

}

public static void main(String[] args) {

Box bc = new Box(8.5,80.3,9.6);

System.out.println(bc.volume());

}

2)

public class CALCI {

public static void main(String[] args) {

System.out.println(Calculator.powerDouble(85.0, 2));

System.out.println(Calculator.powerInt(85,3));

}

}

class Calculator

{

static double powerInt(int num1,int num2)

{

return Math.pow(num1,num2);

}

static double powerDouble(double num1,int num2)

{

return Math.pow(num1,num2);

}

}

}