c programming programs:

1.Even or odd

Input:

#include <stdio.h>

int main() {

int num;

printf("Enter an integer: ");

scanf("%d", &num);

if(num % 2 == 0)

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

else

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

return 0;

}

2.eligible for voting

Input:

#include<stdio.h>

int main()

{

int age;

printf("Enter Age of Person : ");

scanf("%d",&age);

if(age>17)

printf("\nPerson is Eligible for Voting");

else

printf("\nPerson is NOT Eligible for Voting %d years", 17-age);

return 0;

}

3.odd series

Input:

#include <stdio.h>

int main()

{

int i, n;

printf("Print odd numbers till: ");

scanf("%d", &n);

printf("All odd numbers from 1 to %d are: \n", n);

for(i=1; i<=n; i+=2)

{

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

}

return 0;

}

4.even series

Input:

#include <stdio.h>

int main()

{

int i, n;

printf("Print odd numbers till: ");

scanf("%d", &n);

printf("All even numbers from 1 to %d are: \n", n);

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

{

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

}

return 0;

}

5.summulative series

Input:

#include<stdio.h>

int main() {

int n,i;

int sum=0;

printf("Enter the n : ");

scanf("%d",&n);

sum = (n \* (n + 1)) / 2;

printf("Sum : ");

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

if (i!=n)

printf("%d + ",i); else

printf("%d = %d ",i,sum);

}

return 0;

}

6.sum of digits in numbers

Input:

#include<stdio.h>

int main()

{

int n,sum=0,m;

printf("Enter a number:");

scanf("%d",&n);

while(n>0)

{

m=n%10;

sum=sum+m;

n=n/10;

}

printf("Sum is=%d",sum);

return 0;

}

7.for loop using “WELCOME”

Input:

#include<stdio.h>

int main()

{

int i;

for(i=1;i<=1;printf(" WELCOME \n",i++));

return 0;

}

8.while loop using “WELWCOME”

Input:

#include<stdio.h>

int main()

{

int n,i;

printf("WELCOME:");

scanf("%d",&n);

while(i<n)

{

printf("WELCOME\n");

i++;

}

printf("End");

return 0;

}

9.do&while loop using “WELCOME”

INPUT:

#include <stdio.h>

int main()

{

int a = 1;

do

{

printf( "WELCOME\n" );

a ++;

}

while(a <= 1);

return 0;

}

10. Perfect number check 6

Input:

# include <stdio.h>

int main()

{

int i, Number, Sum = 0 ;

printf("\n Enter any number \n") ;

scanf("%d", &Number) ;

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

{

if(Number % i == 0)

Sum = Sum + i ;

}

if (Sum == Number)

printf("\n %d is a Perfect Number", Number) ;

else

printf("\n%d is not the Perfect Number", Number) ;

return 0 ;

}

Output:

6 is a perfect number

11.Reverse number

Input:

#include <stdio.h>

int main() {

int n, reverse = 0, remainder;

printf("Enter an integer: ");

scanf("%d", &n);

while (n != 0) {

remainder = n % 10;

reverse = reverse \* 10 + remainder;

n /= 10;

}

printf("Reversed number = %d", reverse);

return 0;

}

12.Arm strong

Input:

#include<stdio.h>

int main()

{

int n,r,sum=0,temp;

printf("enter the number=");

scanf("%d",&n);

temp=n;

while(n>0)

{

r=n%10;

sum=sum+(r\*r\*r);

n=n/10;

}

if(temp==sum)

printf("armstrong number ");

else

printf("not armstrong number");

return 0;

}

13.Negative array

Input:

#include<stdio.h>

int main()

{

int Size, i, a[10];

printf("\n Enter the Size of an Array : ");

scanf("%d", &Size);

printf("\n Enter the Array Elements : ");

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

{

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

}

printf("\n List of Negative Numbers in this Array : ");

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

{

if(a[i] < 0)

{

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

}

}

return 0;

}

14.Reverse array

Input:

#include <stdio.h>

int main()

{

int arr[] = {16, 18, 27, 16, 23, 21, 19};

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

printf("Original array: \n");

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

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

}

printf("\n");

printf("Array in reverse order: \n");

for (int i = length-1; i >= 0; i--) {

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

}

return 0;

}

15.Duplicate array

Input: #include <stdio.h>

#include <conio.h>

int main ()

{

int arr[20], i, j, k, size;

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

scanf (" %d", &size);

printf (" \n Enter %d elements of an array: \n ", size);

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

{

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

}

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

{

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

{

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

{

{

arr[k] = arr [k + 1];

}

size--;

j--;

}

}

}

printf (" \n Array elements after deletion of the duplicate elements: ");

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

{

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

}

return 0;

}

16.Display position

Input:

#include <stdio.h>

int linearSearch(int a[], int n, int val) {

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

{

if (a[i] == val)

return i+1;

}

return -1;

}

int main() {

int a[] = {70, 40, 30, 11, 57, 41, 25, 14, 52};

int val = 41;

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

int res = linearSearch(a, n, val);

printf("The elements of the array are - ");

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

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

printf("\nElement to be searched is - %d", val);

if (res == -1)

printf("\nElement is not present in the array");

else

printf("\nElement is present at %d position of array", res);

return 0;

}

17.Matrix

Input:

#include <stdio.h>

int main()

{

int rows, cols;

int a[][3] = {

{1, 2,},

{ 5, 6},

};

rows = (sizeof(a)/sizeof(a[0]));

cols = (sizeof(a)/sizeof(a[0][0]))/rows;

int t[cols][rows];

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

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

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

}

}

printf("Transpose of given matrix: \n");

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

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

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

}

printf("\n");

}

return 0;

}