28-09-2023

(2105A41175) DAY2

1.Create an array and find the sum of array elements using functions

#include <stdio.h>

int main()

{

int a[10],i,n,sum=0;

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

scanf("%d",&n);

printf("Enter elements in array : ");

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

{

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

}

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

{

sum+=a[i];

}

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

return 0;

}

OUTPUT:

Enter size of the array : 4

Enter elements in array : 1 2 3 4

sum of array is : 10

2.Linear search using functions

#include <stdio.h>

int main()

{

int array[100],search,i,n;

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

scanf("%d",&n);

printf("Enter the integers \n",n);

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

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

}

printf("Enter a number to search \n");

scanf("%d",&search);

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

{

if (array[i]==search)

{

printf("%d it is present at location \n", search,i+1);

break;

}

}

if (i==n)

printf("%d it is not present in the array \n", search);

return 0;

}

OUTPUT:

enter a number:4

the factorial is:24

3.program to find factorial of a given number

#include<stdio.h>

int fact(int n);

int main()

{

int n,f;

printf("enter a number");

scanf("%d",&n);

f=fact(n);

printf("the factorisl is:%d",f);

}

int fact(int n)

{

if(n==0)

{

return 0;

}

else if(n==1)

{

return 1;

}

else{

return n\*fact(n-1);

}

}

OUTPUT:

enter a number:5

the factorial is:120

4. program to find fibonacci of a given number

#include<stdio.h>

int fib(int x);

void main()

{

int n,f,i,fibo;

printf("enter the limit:");

scanf("%d",&n);

printf("\n the fibonaci series");

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

{

fibo=fib(i);

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

}

int fib(int x)

{

if(x==0||x==1)

return x;

else

return fib(x-1)+fib(x-2);

}

}

OUTPUT:

Enter the number of elements:5

0 1 1 2 3

5.size of struct program

#include<stdio.h>

struct a

{

char x;

double y;

int z;

};

int main()

{

struct a yes;

printf("%d",sizeof(yes));

return 0;

}

OUTPUT: 24