1. Write C program for factorial. Without recursion

#include<iostream>

using namespace std;

int fact(int n)

{

int i,prod =1;

while(n>1)

{

prod = prod\*n;

n= n-1;

}

return prod;

}

int main()

{

int n;

cout<<"Enter a number whose factorial you want to calculate : ";

cin>>n;

cout<<endl<<endl<<"Factorial = "<<fact(n) ;

}

1. Write C program for factorial. With recursion

#include<iostream>

using namespace std;

int fact(int n)

{

if(n>1)

{

return n \* fact(n-1);

}

else

return 1;

}

int main()

{

int n;

cout<<"Enter a number whose factorial you want to calculate : ";

cin>>n;

cout<<endl<<endl<<"Factorial = "<<fact(n) ;

}

1. Fibonacci series C program

#include<iostream>

using namespace std;

int fibonicci (int n)

{

int x=0,y=1;

if(n==2)

{

cout<<x<<" "<<y;

}

else

if(n==1)

{

cout<<x;

}

else

if(n<1)

{

cout<<"Enter a valid number "<<endl;

}

else

if(n>2)

{

int i;

cout<<x<<" "<<y<<" ";

for(i=0;i<n-2;i++)

{

int temp = x;

x = y;

y = y + temp;

cout<<y<<" ";

}

}

}

int main()

{

int n;

cout<<"How many First numbers of fibonicci series do you want : ";

cin>>n;

fibonicci(n) ;

}

1. Prime number in C programming. –

Validate input :-

Number is positive is ok,

Negative is invalid, and

Grater then 10,000 is invalid input.

#include<iostream>

using namespace std;

int prime(int n)

{

if(n<0)

{

cout<<"Invalid Input "<<endl;

}

else

if(n>10000)

{

cout<<"Invalid Input"<<endl;

}

else

{

if(n==0)

{

cout<<"Neither prime nor composite ";

}

else

{

int i;

int count = 0;

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

{

if(n%i==0)

{

count = count + 1;

}

}

if(count == 0)

{

cout<<"Prime Number ";

}

else

{

cout<<"Not a prime number";

}

}

}

}

int main()

{

int n;

cout<<"Enter a number : ";

cin>>n;

prime(n);

}

1. C program find Armstrong number till 1000.

#include<iostream>

using namespace std;

void armstrong()

{

int i,s,sum,temp,count=1;

for(i=0;i<=1000;++i)

{

temp = i;

sum = 0;

do

{

s = temp%10;

s = s\*s\*s;

temp=temp/10;

sum = sum + s;

s = 0;

}while(temp>0);

if(i==sum)

{

cout<<"Number "<<count<<" = "<<i<<endl;

count ++;

}

}

}

int main()

{

armstrong();

}

1. Write a program to print the alphabets in reverse order.

#include<iostream>

using namespace std;

void ra()

{

int i;

int x=90;

for(i=0;i<26;i++)

{

cout<<char(x)<<endl;

x--;

}

}

int main()

{

ra();

}

1. Print your name until user say yes – ‘y’, once you say no – ‘n’ then stop the program.

#include<iostream>

using namespace std;

void name()

{

cout<<"Anubhav"<<endl;

}

int main()

{

char ch;

cout<<"Enter a choice :\n1. Print the Name\n2. Stop\n\ny ---------1st Option\nn ---------2nd Option\n\n";

cin>>ch;

if(ch=='n')

{

exit(0);

}

else

while(ch!='n')

{

name();

cin>>ch;

}

}

1. Write program to check entered number is positive, negative or zero.

#include<iostream>

using namespace std;

void num(int n)

{

if(n<0)

{

cout<<endl<<"Negative Number"<<endl;

}

else

if( n == 0)

{

cout<<endl<<"You entered Zero"<<endl;

}

else

cout<<endl<<"Positive Number"<<endl;

}

int main()

{

int n;

cout<<"Enter the number here :- ";

cin>>n;

num(n);

}