Course NO : CSE-121

Course Name : Objective Oriented Programing Language

Submission Date: 24-01-2023

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| Submitted To |
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**ASSIGNMENT**

**Assignment no - 01**

/\*1.Write a C++ program to find out first n perfect number where n is the input from user\*/

#include<iostream>

using namespace std;

int main()

{

int i,j,end,sum;

cin>>end;

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

{

sum = 0;

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

{

if(i % j == 0)

{

sum += j;

}

}

if(sum == i && i==6)

{

cout<<i<<" is the first perfect number"<<endl;

}

}

return 0;

}

/\*2.C++ program First n Fibonacci series \*/

#include <iostream>

using namespace std;

int main() {

int n, t1 = 0, t2 = 1, nextTerm = 0;

cout << "Enter the number of terms: ";

cin >> n;

cout << "Fibonacci Series: ";

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

if(i == 1) {

cout << t1 << ", ";

continue;

}

if(i == 2) {

cout << t2 << ", ";

continue;

}

nextTerm = t1 + t2;

t1 = t2;

t2 = nextTerm;

cout << nextTerm << ", ";

}

return 0;

}

//the amrstrong number of 1 to 10000

#include<iostream>

using namespace std;

int main()

{

int sl=1,l=10000,d,n,sum,pro,al=10,a[al];

cout<<"The Armstrong numbers between 1 to 10000 are given below ";

for(int i=sl; i<=l; i++)

{ sum=0;

d=0;

n=i;

while(n>0)

{ a[d]=n%10;

d++;

n=n/10;

} for(int j=0;j<d;j++)

{ pro=1;

for(int k=0;k<d;k++)

{

pro=pro\*a[j];

}

sum=sum+pro;

}

if(sum==i)

{

cout<<sum<<endl;

}

}

return 0;

}

/\*4.Write a function which receives a float and an int from main(), finds the product of these two and returns the product which is printed through main() in C++.\*/

#include<iostream>

using namespace std;

float p(float a, int b);

int main()

{

float num1;

int num2;

cin>>num1>>num2;

cout<<p(num1,num2);

}

float p(float a, int b)

{

float product;

product=a\*b;

return product;

}

/\*5.Write a C ++ program which will take an input from user and calculate the grade of a student according to BUBT grading policy based on that input.\*/

#include<iostream>

using namespace std;

int main()

{

int A;

cin>>A;

if (A>=80)

cout<<"mark is A+";

else if (A>=75 && A<80)

cout<<"mark is A";

else if (A>=70 && A<75)

cout<<"mark is A-";

else if (A>=65 && A<70)

cout<<"mark is B+";

else if (A>=60 && A<65)

cout<<"mark is B";

else if (A>=55 && A<60)

cout<<"mark is B-";

else if(A>=50 && A<55)

cout<<"mark is C+";

else if (A>=45 && A<50)

cout<<"mark is C";

else if (A>=40 && A<45)

cout<<"mark is D";

else

cout<<"mark is F";

return 0;

}