Big Integer Library In C++ (v1.0)

The header file for this library is #include <bigintegerc++.h>

which needs to be placed in the include folder of the compiler in use.

For DevCPP the path is C:\Program Files (x86)\Dev-Cpp\MinGW64\include

Click on the link to download the file www.github.com/aditya1308/Big-Integers-CPP

Functions Available

string **add** (string s, string t)

string **sub** (string a, string b)

string **fact** (long long n)

string **bigpow** (long long b, long long p)

string **multiply** (string a, string b)

Function Documentation

◆ add()

string add (string s, string t)

add() takes two arguments and returns a string value.

Parameters

s: a string argument.

t: a string argument.

```
string s="999999999999";
string t="1";
string ans=add(s,t);
cout<<ans;
```

Output is **1000000000000**.

◆bigpow()

string bigpow (long long b,

long long p)

---

bigpow() takes two arguments as integers and returns a string value.

Parameters

b: an integer argument which is the base.

p: an integer argument which is the power of that base

```
long long b="100000";long long
p="2";
string ans=bigpow(b,p);cout<<ans;
```

Output is **10000000000**.

◆fact()

string fact (long long n)

---

fact() takes only one argument and returns a string value.

Parameters

n: an integer argument.

```
long long n=30;
string ans=fact(n);
cout<<ans;
```

Output is **265252859812191058636308480000000**.

◆ multiply()

string multiply (string   a,

           string   b

)

multiply() takes two arguments as string and returns a string value.

Parameters

     a   a string argument.

     b   a string argument.

```
string a="1623908;
string b="1678";
string
ans=multiply(a,b);
```
    Output is **2724917624**.

◆ sub()

string sub (string   a,

        string   b

)

sub() takes two arguments and returns a string value.

Parameters

     a   a string argument.

     b   a string argument.

```
string
s="999999999999"; string
t="100000000000"; string
ans=sub(s,t);
cout<<ans;
```
    Output is **899999999999**.

DEVELOPERS NOTE

Since C++ has no library to handle very big number. The bigintegerc++.h will be very helpful in handling those numbers and help in performing large calculations.

Every function used in these library/header file accepts parameter in either string or in integer format. For string the valid characters that should be used are **'-' and '0-9'**. For integers **'0-9'** in int format.

NOTE:-Any other unnecessary inputs will lead to wrong results and output

If you find any bug or difficulty in using this library, kindly mail me at: asmarty2016@gmail.com.

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