C Header File #1

for easy basic math

A.K.D. Chanupa Athsara

<u>Content</u>

Introduction to header files in C language

In **C language**, header files contain a set of predefined standard library functions. The .h is the extension of the header files in C and we request to use a header file in our program by including it with the C preprocessing directive **"#include".**

C language has numerous libraries that include predefined functions to make programming easier. They are stored in the default directory of the compiler and are present in all the C compilers from any vendor. It contains information for adding diagnostics that aid program debugging.

What is this?

This is a simple header file which was made by me using simple algorithms. You can use it for some basic but major mathematical calculations. But this has only limited mathematical functions which are based on some specific needs.

You should **only use two integers of some floats** if you willing to use this header extension.

Why is this?

I created this header file for do binary-decimal calculations and basic mathematical operations such as,

- Do Addition
- Do Subtraction
- Do Multiplication
- Do Division
- Find the Maximum Value of two numbers
- Find the Maximum Value of two numbers
- Compare two numbers
- Find the Square Root of a number
- Find the Power of a number
- Find the Absolute Value of a number
- Convert Binary to Decimal
- Convert Decimal to Binary

How to Install and setting up

Step 1 :

Download the header file and copy it to your C Compiler Path Folder.

Step 2 :

Use header file when starting C programming by typing the below code after the **stdio.h** file.

#include "chanupamath.h"

Step 3 :

Use the header file like a normal header file and do your calculations easier.

Guidelines to Operations

- **Do Addition –**
  add(x,y);

- **Do Subtraction –**
  sub(x,y);

- **Do Multiplication –**
  multi(x,y);

- **Do Division –**
  div(x,y);

- **Find the Maximum Value of two numbers –**
  max(x,y);

- **Find the Minimum Value of two numbers –**
  min(x,y);

- **Compare two numbers –**
  cmp(x,y);

- **Find the Square Root of a number –**
  sq(x);

- **Find the Power of a number –**
  pwr(x,y);

- **Find the Absolute Value of a number-**
  abs(x);

- **Convert Binary to Decimal –**
  bin(x);

- **Convert Decimal to Binary -**
  dec(x);

About the development

This C header file was built by me, and this is my first test header file project in C language. This could be simpler to a professional developer. But this is made for the beginners in C language.

If you have any reviews, suggestions, or comments on my this very first project, please send them via email to athsara141@gmail.com.

Thank you.

....

Chanupa Athsara
Software Engineering Undergraduate