Chang Li
Jennifer Parham-Mocello
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Assignment 1 corresponding
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PART 1 corresponding

<cmath> library is a library file to compute math operations and transformations such like sin or cos, log or ln, raise to power or square root.

I use some of the basical math functions in <cmath> library: sin, cos, tan, log and pow. Sin, cos and tan stand for to compute the value of sine, cosine and tangent, and log stands for compute common or natural logarithm. For example, if I want to give the value of sin 30 rad to the variable a, it will show as: “a = sin 30;”. If I want to compute the natural log of 60 and then give the value to the variable e, it will showed in the code as:” e=log(60.0)”. If I want to compute the value of 3^6, I can write in code as:” pow(3,6)”

Finally, for test these results on the compiler is right, I use wolfram alpha and google to calculate and compare these value which in the compiler.

PART 2 corresponding

<climits> is a library file to allow to use series of marcro constants like “INT_MIN” and “INT_MAX” to show the minimum and the maximum value which an integral type in a computer can hold. For example, “CHAR_BIT” tells how many bit in a char object that my computer can hold, which is 8. “INT_MAX” tells the maximum value of an int type can go though. So on and so forth.

I use 9 elements from <climits> which are: “INT_MAX”,“INT_MIN”,“UINT_MAX”,“LONG_MAX”,“LONG_MIN”,“ULONG_MAX”,“SHRT_MAX”,“SHRT_MIN” and “USHRT_MAX”.

I also use the pow fuction from <cmath> library to test the largest and the smallest int, long and short type. For example, If I want to see the largest int type which my computer can hold, instead of use “INT_MAX” to see it, I can first use “sizeof(int)” to see how many byte which an int type can reach and then “sizeof(int)*8” to transform from byte to bits, and then “pow(2, (sizeof(int)*8-1))” which means 2^(sizeof(int)*8-1) to transform the largest binary number that the int type can have to decimal. That is how I use “pow” fuction from <cmath> to see the largest int type number that my computer can have.