

Output from Run on linux

Integer overflow occurred when 1000000000 was multiplied with 3

Integer overflow did not occur occur when 1000000000 was multiplied with 2

Integer overflow has occurred while computing factorial of: 13

Integer overflow has occurred while computing fibonacci of sequence length: 46

At 309th iteration, the floating point overflowed

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Floating Operations : INFINITY

Value of $1/x$ where x is infinity is: Positive Zero

Value of $\sin(x)$ where x is infinity is: NAN

Value of $\exp(x)$ where x is infinity is: Positive Infinity

Floating Operations : NEGATIVE INFINITY

Value of $1/x$ where x is -infinity is: Negative Zero

Value of $\sin(x)$ where x is -infinity is: NAN

Value of $\exp(x)$ where x is -infinity is: Positive Zero

Floating Operations : NAN

Value of $1/x$ where x is NAN is: NAN

Value of $\sin(x)$ where x is NAN is: NAN

Value of $\exp(x)$ where x is NAN is: NAN

Value of $\log(x)$ where x is +0 is: Negative Infinity

Value of $\log(x)$ where x is -0 is: Negative Infinity

Value of $\sin(x)/x$ where x is +0 is: NAN

Value of $\sin(x)/x$ where x is -0 is: NAN

Value of $\sin(x)/|x|$ where x is +0 is: NAN

Value of $\sin(x)/|x|$ where x is -0 is: NAN

Value of $\sin(1.23456789012345x)/x$ where x is +0 is: NAN

At iteration number 22, both the conditions $(X==Y)$ and $(X-Y == 0)$ got true which means the gradual underflow is supported in the compiler

At iteration number 19, both the conditions $(X==Y)$ and $(X-Y == 0)$ got true which means the gradual underflow is supported in MacOS

Pi Calculation

Pi is 3.14159265358979323851280895941