```c
/* Calculation of the infinite series of exp(x)
 *
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 *
 * Use the following to compile:
 * gcc -o infinit_series.exe -std=c99 -O3 -lm infinit_series.c
 * clang -o infinit_series.exe -lm infinit_series.c
 *
 */

#include <stdio.h>
#include <stdlib.h>
#include <math.h>
#include <limits.h>

int main(){
// Specifying User Input Parameter
float x;        //single precision
double xd;      //double precision
printf("Enter 2 of the same number:\n");
scanf("%f%lf",&x,&xd);

// Global Variable
int i;

// FLOAT - Single Precision
float e, fact, increment;
float tol = 1e-8f;      //f after value specifu storing as single precision
fact = 1.0f;            // "
e = 1.0f;               // "

for( i = 1; i < ULONG_MAX ; i++ ){
        fact = fact * i;                        //factorial calculation
        increment = pow(fabsf(x),i) / fact;     //broken up for stopping criterion
        e = e + increment;                      //infinite series

        if (increment < tol){
                if ( x < 0 ){   //to accurately calculate the negative x value
                e = 1/e;
                }
        printf("Single Precision: x = %1.0f, e = %1.6f, exp(x) = %1.6f\n",x,e,exp(x));
        break;
        }
}

// DOUBLE - Double Precision
double c, factd, incrementd;
double told = 1e-8;     // not putting d after number stores as double
factd = 1;
c = 1;

for( i = 1; i < ULONG_MAX ; i++ ){
        factd = factd * i;              //factorial calculation
        incrementd = pow(fabs(xd),i) / factd;   //broken up for stopping criterion
        c = c + incrementd;             //infinite series

        if (incrementd < told){
                if ( xd < 0 ){   //to accurately calculate the negative x value
                c = 1/c;
                }
        printf("Double Precision: x = %1.0lf, e = %1.15lf, exp(x) = %1.15lf\n",xd,c,exp(xd));
        break;
        }
}
return EXIT_SUCCESS;
}
```