

Other helpful hints:

A possible main program for this assignment (MAXDIG and maybe PRTDIG, along with appropriate includes/prototypes/functions need to be added):

```
void main()
{
    int Term[MAXDIG], Sum[MAXDIG], NewTerm[MAXDIG], N=0;

    ZeroArray(Term);
    ZeroArray(Sum);
    Term[0]=1;
    Sum[0]=1;
    printf("N=%3d -----\n", N);
    printf("TRM="); PrintArray(Term); printf("\n");
    printf("SUM="); PrintArray(Sum); printf("\n");

    for (N=1; N<NUMTRM; N++)
    {
        DivArrayScaler(Term, N, NewTerm);
        CopyArray(Term, NewTerm);
        AddArray(Sum, Term, Sum);

        printf("N=%3d -----\n", N);
        printf("TRM="); PrintArray(Term); printf("\n");
        printf("SUM="); PrintArray(Sum); printf("\n");
    }
}
```

A simple (no arrays) program to calculate e within the limits of double's is below:

```
#define _CRT_SECURE_NO_DEPRECATED
#include <stdio.h>
#define NUMTRM 40

void main()
{
    double Term, Sum;
    int N=0;

    Term=1.0;
    Sum=1.0; // ....1....2
    printf("N=%3d -----\n", N);
    printf("TRM=%20.18lf\n", Term);
    printf("SUM=%20.18lf\n", Sum);

    for (N=1; N<NUMTRM; N++)
    {
        NewTerm = Term / (double) N;
        Term = NewTerm;
        Sum = Sum + Term;
        // ....1....2
        printf("N=%3d -----\n", N);
        printf("TRM=%20.18lf\n", Term);
        printf("SUM=%20.18lf\n", Sum);
    }
}
```