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#include "toolbox.h"
#include <ansi_c.h>
typedef (*FPTR)(void *, void *);

typedef double (*FPDD)(double); // Pointer to function that return double

void FillArrayWithFuncValues(FPDD f, double Array[], double Min, double Max, int N)
{
    int i;
    double T = (Max-Min)/N;
    for (i=0; i<N; i++)
        Array[i] = f(Min+T*i);
}

void main()
{
#define LEN 20
    int i;
    double ArraySin[LEN];
    double ArrayCos[LEN];
    FillArrayWithFuncValues(sin, ArraySin, 0.0, Pi(), LEN);
    FillArrayWithFuncValues(cos, ArrayCos, 0.0, Pi(), LEN);

    for (i=0; i<LEN; i++)
        printf("%lf      %lf \n", ArraySin[i], ArrayCos[i]);

    getchar();
}
```