```c
#include <stdio.h>
#include "math.h"

double f(double x)
{
      return sin(x);
}

int main()
{
      double a = 0;
      double b = 1;
      int n = 20;
      int i;
      double h = (b-a)/n;
      double x, y;

      FILE *file1;
      file1 = fopen("in.txt", "wt");

      for(i = 0; i <= n; i++)
      {
            x = a +i*h;
            y = f(x);
            printf("%le \t %le \n", x, y);
            fprintf(file1, "%le \t %le\n", x, y);
      }

      fclose(file1);

      return 0;
}
```