

#include <stdio.h>

#include <math.h>

#define EPS .00000001

double func\_f(double);

int main()

{

double x = 0.0, y = 0.0;

double h = 0.0625, dx = 0.0625, xmax = 5;

double ddx = 0.0;

printf(" X\t Y\n");

do

{

if (x >= ddx - EPS)

{

ddx += dx;

printf("%7.4f, %7.4f\n", x, y);

}

y += h \* func\_f(x);

x += h;

} while (x <= xmax);

return 0;

}

double func\_f(double x)

{

return -2 \* x + 4 + 2 \* x \* sin(5 \* x);

}