#include <stdio.h>

#include <math.h>

typedef struct cords{

int x , y ;

float (\*distance)(int x , int y);

// Tells us the pointer to the function with it's arguments ( int x , int y )

float dis ;

}Cords ;

//Body of the function we are going to pass to the pointer of structure

float calculate(int x , int y){

int X = pow(x,2);

int Y = pow(y,2);

return ( sqrt(X+Y));

}

int add(int x,int y){

return x+y;

}

void main(void){

Cords c1 ;

c1.x = 3 ;

c1.y = 4 ;

c1.distance = calculate ;// Passing The function to the pointer in the structure

c1.dis = c1.distance( c1.x , c1.y);//calling the function of the structure

printf("%f\n",c1.dis);

///////////////////////

return 0;

int(\*pointer1)(int,int);

pointer1=add;

printf("%d\n",pointer1(3,4));

int (\*pointer2)(int,int);

pointer2=&add;

printf("%d",(\*pointer2)(4,5));

}