```c
/*##############################################################*/
/*HW00_HASAN_MEN_131044009_part1.c                              */
/*_____________________________                                 */
/*Written by Hasan MEN on February 14, 2015                     */
/*                                                              */
/*Description                                                   */
/*___________                                                   */
/*Takes the Integral of a given 1st degree polynomial           */
/*Inputs:                                                       */
/*  -Coefficients of the 1st degree polynomial                  */
/*  -Zero input value of the resulting polynomial               */
/*Outputs:                                                      */
/*  -Resulting 2nd degree polynomial                            */
/*##############################################################*/
/*                                                              */
/*--------------------------------------------------------------*/
/*                          Includes                            */
/*--------------------------------------------------------------*/

#include <stdio.h>

int main(){
    /* Start of main */
    double ia0, ia1;     /*cofficients of the input poly*/
    double p0;       /*P(0) value of the resulting poly*/
    double ra0, ra1, ra2;     /*coefficients of the resulting poly*/
    /* End of variables */

    /*Get the 1st degree input polynomial*/
    printf("Enter the coefficients of the poly (from higher to lower order)>");
    scanf("%lf%lf", &ia1, &ia0);

    /*Get the zero input of the resulting poly(2nd degree polynomial)*/
    printf("Enter P(0) value for the resulting polynomial=>");
    scanf("%lf", &p0);

    /*Calculate the resulting poly*/
    ra2 = (1.0/2) * ia1;    /* ra2 => a/2 in (ax^2+bx+c) */
    /*(1.0/2) use to convert from integer to double*/

    ra1 = ia0;          /* ia0 => b in (ax^2+bx+c)   */
    ra0 = p0;           /* rao => c in (ax^2+bx+c)   */

    /*Output the resulting poly*/
    printf("The resulting poly is %5.2fx^2 + %5.2fx + %5.2f\n", ra2, ra1, ra0);

    return 0;   /*program works succesfully*/
}
/*##############################################################*/
/*            End of HW00_HASAN_MEN_131044009_part1.c           */
/*##############################################################*/
```