

```

1  /*#####*/
2  /*HW01_HASAN_MEN_131044009_part2.c */
3  /* */
4  /*Written by Hasan MEN on February 19, 2015 */
5  /* */
6  /*Description: */
7  /* */
8  /*This program, take 2 function and find commoncoefficient..*/
9  /*than its write x and y on new funciton and calculate */
10 /*INPUT: */
11 /* */
12 /* -Coefficients of funcitons */
13 /* -COefficient of 3rd func. to calculate new value */
14 /*OUTPUT: */
15 /* */
16 /* -x and y :commond coef. */
17 /* -F(x,y) : result of 3rd function */
18 /*#####*/
19 #include <stdio.h>
20
21 int main(){
22     /*START_OF_MAIN*/
23     double cf0ne1,cf0ne2,resOne; /*func 1*/
24     double cfTwo1,cfTwo2,resTwo; /*func 2*/
25     double x,y; /*commont coef*/
26     double cfFuncA,cfFuncB; /*func 3*/
27     FILE *equ; /* func1 and func2 coef. file pointer */
28     FILE *func; /* func3 coef file pointer*/
29     FILE *rslt; /* resault[F(x,y)] file pointer*/
30     /*END_OF_VARIABLES*/
31
32     /*Opening i/o file*/
33     equ = fopen("EqCoefficients.txt","r");
34     func = fopen("FuncCoefficients.txt","r");
35     rslt = fopen("Results2.txt","w");
36
37     /*scanning coefficients of func1 and func2 from equ file*/
38     printf("Reading Coefficient of Equation 1 --> ");
39     fscanf(equ,"%lf%lf%lf",&cf0ne1,&cf0ne2,&resOne);
40     printf("First equation => %.2fX + %.2fY = %.2f\n",cf0ne1,cf0ne2,resOne);
41     printf("Reading Coefficient of Equation 2 --> ");
42     fscanf(func,"%lf%lf%lf",&cfTwo1,&cfTwo2,&resTwo);
43     printf("Second equation => %.2fX + %.2fY = %.2f\n",cfTwo1,cfTwo2,resTwo);
44
45     /*CALCULATE X VALUE */
46     x = (((-cfTwo2)*resOne)+(cf0ne2*resTwo))/(cf0ne1*(-cfTwo2)+(cf0ne2*cfTwo1));
47     printf("X => %.2f\n",x);
48
49     /* CALCULATE Y VALUE with using value of x*/
50     y = ((resOne-(x*cf0ne1)) / cf0ne2);
51     printf("Y => %.2f\n",y);
52
53     /*Printf file x and y */
54     fprintf(rslt,"%.2f\t%.2f\t",x,y);
55
56     /*Scan coeffients of function 3 */
57     printf("Reading Coefficient of Function --> ");
58     fscanf(func,"%lf%lf",&cfFuncA,&cfFuncB);
59     printf("Function => %.2fX + %.2fY\n",cfFuncA,cfFuncB);
60
61     /* print screen and file value of new func3 */
62     printf("F(x,y) = %.2f\n",x*cfFuncA+y*cfFuncB);
63     fprintf(rslt,"%.2f",x*cfFuncA+y*cfFuncB);
64
65     /*CLOSE_FILE*/
66     fclose(equ);
67     fclose(func);
68     fclose(rslt);
69     return 0;
70     /*END_OF_MAIN*/
71 }
72 /*#####*/
73 /* HW01_HASAN_MEN_131044009_part2.c */
74 /*#####*/

```