```c
#include<stdio.h>

#include<conio.h>

#include<math.h>

int main()

{

        int n,i,x[20],y[20],sumx=0,sumy=0,sumxy=0,sumx2=0;

        float a,b;

        clrscr();

        printf("\n C program for Linear Curve Fitting \n ");

        printf("\n Enter the value of number of terms n:");

        scanf("%d",&n);

        printf("\n Enter the values of x:\n");

        for(i=0;i<=n-1;i++)

        {

                scanf(" %d",&x[i]);

        }

        printf("\n Enter the values of y:");

        for(i=0;i<=n-1;i++)

        {

                scanf("%d",&y[i]);

        }

        for(i=0;i<=n-1;i++)

        {

                sumx=sumx +x[i];

                sumx2=sumx2 +x[i]*x[i];

                sumy=sumy +y[i];

                sumxy=sumxy +x[i]*y[i];
```

```
        }

        a=((sumx2*sumy -sumx*sumxy)*1.0/(n*sumx2-sumx*sumx)*1.0);

        b=((n*sumxy-sumx*sumy)*1.0/(n*sumx2-sumx*sumx)*1.0);

        printf("\n\nThe line is Y=%3.3f +%3.3f X",a,b);

        getch();

        return(0);

}
```

```
   C program for Linear Curve Fitting

   Enter the value of number of terms n:4

   Enter the values of x:
-1
0
1
2

   Enter the values of y:1
0
1
4


The line is Y=1.000 +1.000 X_
```