

```

#include<stdio.h>
#include<math.h>
int main()
{
float x[11],y[11], sum_x=0, sum_y=0, sum_x2=0, sum_xy=0,k,a,b;
int n,r,i;
printf("Enter the value of last digit of roll no\n");
scanf("%d",&r);
printf("Enter the number of data\n");
scanf("%d", &n);
printf("Enter the x data \n");
for(i=1;i<=n; i++)
scanf("%f", &x [i]);
k=(3*r)/20.;
printf("Enter the y data \n");
for(i=1;i<=n;i++)
{
scanf ("%f",&y[i]);
y[i]=y[i]+k;
}
for (i=1;i<=n;i++)
{
sum_x=sum_x+x[i];
sum_y=sum_y+y[i];
sum_x2=sum_x2+pow(x[i], 2) ;
sum_xy=sum_xy+x[i] *y[i];
}
a=(n*sum_xy-sum_x*sum_y)/ (n*sum_x2 -sum_x*sum_x);
b=(sum_x2*sum_y-sum_xy*sum_x)/ (n*sum_x2-sum_x*sum_x);
printf("\nThe curve is y=%6.4fx%6.4f\n", a, b);
printf(" (correct up to four decimal places) \n") ;
return 0;
}
/*Output*/
Enter the value of last digit of roll no
3
Enter the number of data
9
Enter the x data
1.4 2.4 3.4 4.4 5.4 6.4 7.4 8.4 9.4
Enter the y data
3.9 7.4 9.1 12.5 15.9 20.1 24.6 23.6 29.5

The curve is y=3.1600x-0.3251
(correct up to four decimal places)

```