#include<stdio.h>

#include<conio.h>

int main()

{

int n,i;

float a[20], b[20], c[20],d[20], x[20], alpha[20], beta[20];

printf("Enter the size of the array\n");

scanf("%d", &n);

printf("Enter the values of a's\n");

for(i=2;i<=n;i++)

{

scanf("%f", &a[i]);

}

printf("Enter the values of b's\n");

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

{

scanf("%f", &b[i]);

}

printf("Enter the values of c's\n");

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

{

scanf("%f", &c[i]);

}

printf("Enter the values of d's\n");

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

{

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

}

alpha[1]=b[1];

for(i=2;i<=n;i++)

{

alpha[i]=b[i]-a[i]\*c[i-1]/alpha[i-1];

}

beta[1]=d[1]/b[1];

for(i=2;i<=n;i++)

{

beta[i]=(d[i]-a[i]\*beta[i-1])/alpha[i];

}

x[n]=beta[n];

for(i=n-1;i>=1;i--)

{

x[i]=beta[i]-c[i]\*x[i+1]/alpha[i];

}

printf("The solution are\n");

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

{

printf("%f\t", x[i]);

}

return 0;

}

//Enter the size of the array

//3

//Enter the values of a's

//1

//1

//Enter the values of b's

//2

//2

//2

//Enter the values of c's

//3

//-1

//Enter the values of d's

//8

//2

//8

//The solution are

//1.000000 2.000000 3.000000