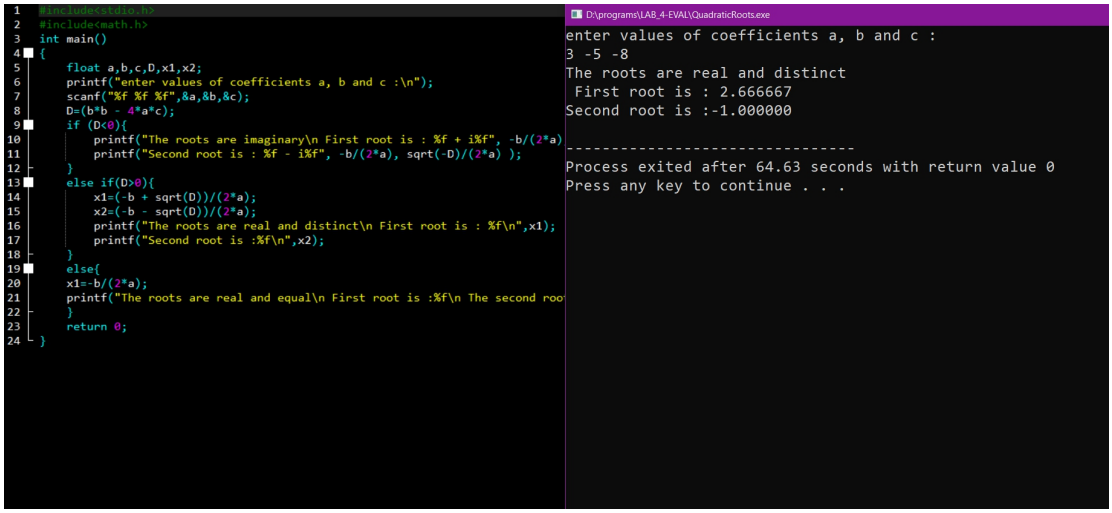
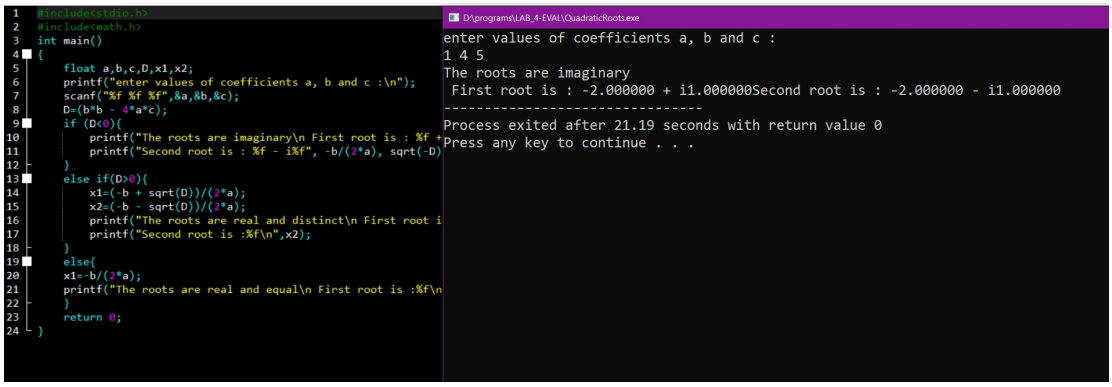
1) FIND ROOTS OF QUADRATIC EQUATION



```c
#include<stdio.h>
#include<math.h>
int main()
{
    float a,b,c,D,x1,x2;
    printf("enter values of coefficients a, b and c :\n");
    scanf("%f %f %f",&a,&b,&c);
    D=(b*b - 4*a*c);
    if (D<0){
        printf("The roots are imaginary\n First root is : %f + i%f", -b/(2*a)
        printf("Second root is : %f - i%f", -b/(2*a), sqrt(-D)/(2*a) );
    }
    else if(D>0){
        x1=(-b + sqrt(D))/(2*a);
        x2=(-b - sqrt(D))/(2*a);
        printf("The roots are real and distinct\n First root is : %f\n",x1);
        printf("Second root is :%f\n",x2);
    }
    else{
    x1=-b/(2*a);
    printf("The roots are real and equal\n First root is :%f\n The second roo
    }
    return 0;
}
```

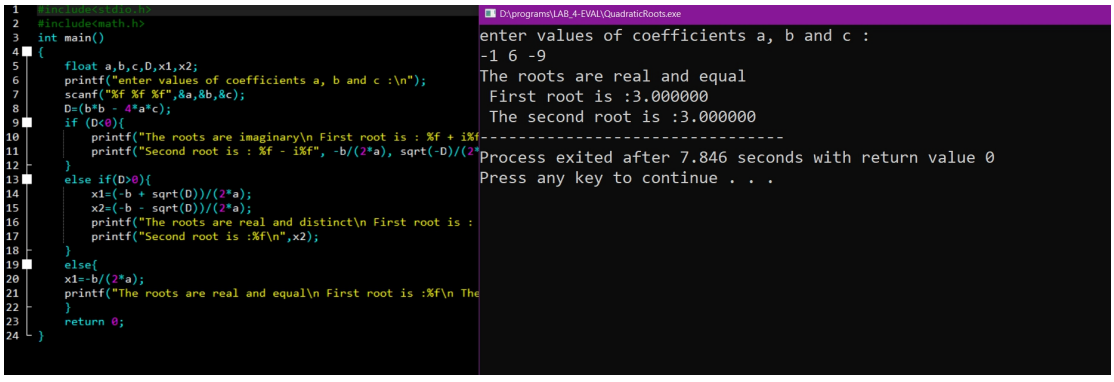
```
D:\programs\LAB_4-EVAL\QuadraticRoots.exe
enter values of coefficients a, b and c :
3 -5 -8
The roots are real and distinct
 First root is : 2.666667
Second root is :-1.000000

--------------------------------
Process exited after 64.63 seconds with return value 0
Press any key to continue . . .
```



```c
#include<stdio.h>
#include<math.h>
int main()
{
    float a,b,c,D,x1,x2;
    printf("enter values of coefficients a, b and c :\n");
    scanf("%f %f %f",&a,&b,&c);
    D=(b*b - 4*a*c);
    if (D<0){
        printf("The roots are imaginary\n First root is : %f +
        printf("Second root is : %f - i%f", -b/(2*a), sqrt(-D)
    }
    else if(D>0){
        x1=(-b + sqrt(D))/(2*a);
        x2=(-b - sqrt(D))/(2*a);
        printf("The roots are real and distinct\n First root i
        printf("Second root is :%f\n",x2);
    }
    else{
    x1=-b/(2*a);
    printf("The roots are real and equal\n First root is :%f\n
    }
    return 0;
}
```

```
D:\programs\LAB_4-EVAL\QuadraticRoots.exe
enter values of coefficients a, b and c :
1 4 5
The roots are imaginary
 First root is : -2.000000 + i1.000000Second root is : -2.000000 - i1.000000
--------------------------------
Process exited after 21.19 seconds with return value 0
Press any key to continue . . .
```



```c
#include<stdio.h>
#include<math.h>
int main()
{
    float a,b,c,D,x1,x2;
    printf("enter values of coefficients a, b and c :\n");
    scanf("%f %f %f",&a,&b,&c);
    D=(b*b - 4*a*c);
    if (D<0){
        printf("The roots are imaginary\n First root is : %f + i%f
        printf("Second root is : %f - i%f", -b/(2*a), sqrt(-D)/(2*
    }
    else if(D>0){
        x1=(-b + sqrt(D))/(2*a);
        x2=(-b - sqrt(D))/(2*a);
        printf("The roots are real and distinct\n First root is :
        printf("Second root is :%f\n",x2);
    }
    else{
    x1=-b/(2*a);
    printf("The roots are real and equal\n First root is :%f\n The
    }
    return 0;
}
```

```
D:\programs\LAB_4-EVAL\QuadraticRoots.exe
enter values of coefficients a, b and c :
-1 6 -9
The roots are real and equal
 First root is :3.000000
 The second root is :3.000000
--------------------------------
Process exited after 7.846 seconds with return value 0
Press any key to continue . . .
```

2) FIND SMALLEST OF 3 NUMBERS

```c
#include<stdio.h>
int main()
{
    int num1,num2,num3;
    printf("Enter three numbers:");
    scanf("%d %d %d",&num1,&num2,&num3);
    if(num1 < num2 && num1 < num3)
    {
        printf("%d is smallest",num1);
    }
    else if(num2 < num3)
    {
        printf("%d is smallest",num2);
    }
    else
    {
        printf("%d is smallest",num3);
    }
    return 0;
}
```

```
D:\programs\LAB_4-EVAL\SmallestOf3.exe
Enter three numbers:2 9 5
2 is smallest
--------------------------------
Process exited after 14.11 seconds with return value 0
Press any key to continue . . .
```

```c
#include<stdio.h>
int main()
{
    int num1,num2,num3;
    printf("Enter three numbers:");
    scanf("%d %d %d",&num1,&num2,&num3);
    if(num1 < num2 && num1 < num3)
    {
        printf("%d is smallest",num1);
    }
    else if(num2 < num3)
    {
        printf("%d is smallest",num2);
    }
    else
    {
        printf("%d is smallest",num3);
    }
    return 0;
}
```

```
Select D:\programs\LAB_4-EVAL\SmallestOf3.exe
Enter three numbers:9 6 10
6 is smallest
--------------------------------
Process exited after 9.604 seconds with return value 0
Press any key to continue . . .
```