```c
#include<stdio.h>
#include<stdlib.h>
#include<math.h>

/
*********************************************************************
*******
*Function        :       main
*Input parameters:       no parameters
*RETURNS         :       0 on success
*********************************************************************
*******/

int main(void)
{
        float fA,fB,fC,fDesc,fX1,fX2,fRealp,fImagp;


printf("\n****************************************************************
***");
        printf("\n*\tPROGRAM TO FIND ROOTS OF A QUADRATIC EQUATION\t
*\n");

printf("*****************************************************************
*");


        printf("\nEnter the coefficients of a,b,c \n");
        scanf("%f%f%f",&fA,&fB,&fC);
        if(0 == fA)
        {
                printf("\nInvalid input, not a quadratic equation –
try again\n");
                exit(0);
        }

        /*COMPUTE THE DESCRIMINANT*/
        fDesc=fB*fB–4*fA*fC;

        if(0 == fDesc)
        {
                fX1 = fX2 = –fB/(2*fA);

                printf("\nRoots are equal and the Roots are \n");
                printf("\nRoot1 = %g and Root2 = %g\n",fX1,fX2);
        }
        else if(fDesc > 0)
        {
                fX1 = (–fB+sqrt(fDesc))/(2*fA);
                fX2 = (–fB–sqrt(fDesc))/(2*fA);
                printf("\nThe Roots are Real and distinct, they are
\n");
                printf("\nRoot1 = %g and Root2 = %g\n",fX1,fX2);
        }
```

```c
		else
		{
			fRealp = -fB / (2*fA);
			fImagp = sqrt(fabs(fDesc))/(2*fA);
			printf("\nThe Roots are imaginary and they are\n");
			printf("\nRoot1 = %g+i%g\n",fRealp,fImagp);
			printf("\nRoot2 = %g-i%g\n",fRealp,fImagp);
		}

		return 0;
}

/*
(1,-5,6)
(1,4,4)
(1,3,3)
*/
```