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

int main(){

    //Write a C program to find all roots of a quadratic equation

    double discriminant,a,b,c, root1, root2, real, imaginary;

    printf("Enter a b c :");
    scanf("%lf %lf %lf", &a,&b,&c);

    discriminant = ((b*b)-(4*a*c));

    if (discriminant > 0){
        root1 = (( -b + sqrt(discriminant)) / (2*a));
        root2 = (( -b - sqrt(discriminant)) / (2*a));
        printf("Roots are real and different Root 1 is %lf Root 2 is %lf \n", root1, root2);
     }
     else if (discriminant == 0){
        root1 = -b / (2 *a);
        printf("Root are real and equal Root 1 and Root 2 is %lf", root1);

     }

     else{
        real = -b / (2 * a);
        imaginary = sqrt(discriminant) / (2 * a);
        printf("Roots are imaginary %lf, ± ,%lf,i", real,imaginary );

    }
    return 0;
}
```