PROGRAM-3

Q, Develop a C program to find all possible roots of a quadratic equation.

```
#include<stdio.h>
#include<math.h>
#include<conio.h>
int main()
{
    float x, y, z, dis, root1, root2, real, img;
    printf("\n Enter the value of coefficient x, y and z:\n");
    scanf("%F %F %F", &x, &y, &z);
    dis = y*y - 4*x*z;
    if (dis>0)
    {
    root1 = (-y + sqrt(dis)) / (2*x);
    root2 = (-y + sqrt(dis)) / (2*x);
    printf("\n Value of root1 = %.2F and value of root2 = %.2F",
            root1, root2);

    }
    else if (dis==0)
    {
        root1 = root2 = -y/(2*x);
        printf("\n Value of root1 = %.2F and Value of root2=%
                root1, root2);

    }
```

```
else {
    real = -y /(2 *x);
    img = sqrt(-dis) /(2 *x);
    printf ("\n Value of root1 = %0.2F + %0.2F and
            Value of root 2 = %0.2F - %0.2F", real, img, real, img);
}
getch();
}
```