BE YOUR SELF

AND PEOPLE WILL LIKE YOU ANYWAY

```
#include<stdio.h>
#include<conio.h>
#include<math.h>
void quadraticroots( float, float, float);
int main()
{
float p,q,r;
printf("in a quadratic equation of a form
ax^2+bx+c=0,enter the coefficients of a,b
and c\n");
scanf("%f %f %f",&p,&q,&r);
quadraticroots(p,q,r);
getch();
return 0;
}
void quadraticroots(float a,float b, float c)
{
float
discriminant,root1,root2,realpart,imagpart;
discriminant=pow(b,2)-4*a*c;
if(discriminant>0)
{
root1=(-b+sqrt(discriminant))/(2*a);
root2=(-b-sqrt(discriminant))/(2*a);
printf("root1=%f and root2=%f", root1, root2);
else if(discriminant==0)
root1=root2=-b/(2*a);
printf("root1=root2=%f", root1);
}
else
{
realpart=-b/(2*a);
imagpart=sqrt(-discriminant)/(2*a);
printf("1st root=(%f +%fi) and 2nd root=(%f
-%fi),where
1)^(0.5)",realpart,imagpart,realpart,imagpart);
}
return;
```

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Compile Result

```
in a quadratic equation of a fo
rm ax^2+bx+c=0,enter the coeffi
cients of a,b and c
5
8
9
1st root=(-0.800000 +1.077033i)
  and 2nd root=(-0.800000-1.0770
33i),where i=(-1)^(0.5)
[Process completed - press Ente
r]
```

Experiment Name / No.: 3. Program to find all passible roots of	Camlin Page No.
Experiment Name / No.: 3. Program to find all possible roots of quadratic equation.	
# include <stdia. h=""></stdia.>	
# include < conio. h >	
# include < math. h>	
void quadraticrosts (float, float, float);	
5 int main ()	
E	
float p. q. x;	
print f "In a greadratic equation of a form	nax²+bx+c
print f In a quadratic equation of a form a x2 + bx + c = 0, enter the coeffecients of a, b and	
10 C h J,	
Scant ("% of % of ", &p, &q,&	x);
quadratic roots (p, q, x);	The Market State of the State o
getch ();	
rctorn O;	
15	^
void quadraticroots (float a, float b, float c	
2	
float discriminant, root 1, root 2, real p	past imag part;
float discriminant, root 1, root 2, real p discriminant = pow (b, 2) - 4* a * C if (discriminant > 0)	
if (discriminant >0)	
& root 1 = (-b + sqrt (dis criminant))/(2*a);
printf ("Yout 1 = % of and root 2 = %	nt))/(2+a).
printf ("yout 1 = % of and root 2 = %	of" root, roots
2	
else if (discriminant == 0)	
$\mathcal{E} \text{ root}_1 = \text{root}_2 = -b/(2 * a).$	
$\mathcal{E} \text{ root}_1 = 800t2 = -b/(2*a);$ $printf("\text{root}_1 = 800t2 = \%f", 800t1);$	
Teacher's Signa	

Camilia Passa imag past = - b/(z*a);
imag past = syst (-discriminant)/(z*a);
print f("1st root = (xof + yof 1) and z*d root

= (x-f-yof i), where 1= (-1)^1 (0.5)",

real part, imag past, real part, imag past);