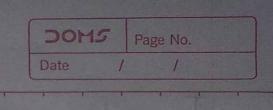
MA12-12-28-20115 Page No.
Date 12 / 12 /2023 Develop a Java program that prints all real solutions to the gudsatic equation oxit boxtc=0. Read a, b, c and use the quadratic formula The discriminate b2- 4ac is negative, display a message stating that there are no real impost java util . Scanner: class Quidrotic int a,b,c: double of 05 d; void getd() Scanner S = new Scanner (System.in).
System. out. println ("Enter the coefficients of a, b, c 99): a = S. nextInt(); b = S. next Int(); c = s. nextInt(); void compute () while (a==0) System. out. pointln ("Not a quadratic equation "); System.out. println ("Enter a non rero value for a;"):

Lob: 1

solutions

```
Scanner S = new Scanner (System.in).
 a = 8. nextInt();
d = b*b-4*a*c;
if (d==0) 4i
  81 = (-b)/(2 * a)
  System. out. println ("Roots are real and
   System. out. println ("Root1 = Root2 ="+81)
else if (d>0)
  71 = ((-b) + (Moth. sqxt(d))/ (double)(2+a).
  32 = ((-b) - (Math. sqst(d)))/(double)(2*a)
  System. out println ("Roots are real and
  System. out. println ("Root 1=" + 81+ "Root 2="
         +80).
else if (d<0)
 System. out println ("Roots are imaginary");
 8[= (-b)/(2*a);
 82 = Math. sq8t(-d)/(2 x a).

System. out. pointln ("Root1="+ R1+"+i"+
System. out. print In ("Root! = "+ R1 +"-1"
```



```
3
```

class QuadraticMain

public static void main (String args[])

Qudratic q = new Qudratic(); q. get(); q. compute();

7

Output:

C: \ Users \ Admin \ Desktop \ 2023bms02541>
javac Quadrotic.java

c: \ Users \ Admin \ Desktop \ 2023bmg02541>
java Quadratic

Enter the coefficients of a,b,c

2

5

3

Roots are real and distinct Root1 = -1.0 Root = -1.5 Enter the coefficients of aboc

4

Roots are imaginary

Root 1 = -1.0 + i1. 4142135623730951

Root 1 = -1.0 - il. 4142135623730951

Enter the coefficients of a,b,c

5

Not a quadratic equation

Enter a non zero value for a:

Roots are imaginary Root1 = 0.0 + 10.5266343608235224

Roots = 0.0 -i 0.5266343608235224

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