IBMI9CSO45
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Date _____

Expt. No. _____1_____   WEEK 3   Page No. 29/9/20
QUADRATIC EQUATION

```java
import     java.util.Scanner;

class   equadeqn
{ public   static   void   main ( String args[])
    {  int double      a, b, c, d;
    double       r1, r2;
    Scanner      get = new  Scanner( System.in);
    System.out.println (" Enter the three coefficients according
    to  decreasing   power of  x : \n");
    a = get.nextDouble ();
    b = get.nextDouble();
    c = get.nextDouble();
    System.out.println (" a = " + a + " b = " + b + " c = " + c );
    d= b*b - 4*a*c ;
    if (d>=0)
    { System.out.println (" Roots are   real and unequal ");
      r1 = (-b + Math.sqrt (d))/(2*a) ;
      r2 = (-b +- Math.sqrt (d))/(2*a) ;
      System.out . println (" \n r1 = " + r1 + " r2 = " + r2 );

    }
    else
    if (d=0)
    { System.out.println ("Roots are equal and real ");
      r1 = (-b)/(2*a) ;
      System.out.println ("\n r = " + r1); }
    else  if (d<0)
      System.out.println (" Roots are imaginary ");

    }
}
```