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IBM19 CS214

Lab Program

① Quadratic equation

```java
import. java. util. Scanner;
public static void main (String [] args) {
int a, b, c;
double d, r₁, r₂;

Scanner in = new Scanner (System. in);
System. out. println ("Enter the values of a, b, c");
a = in. nentInt ();
b = in. nentInt ();
c = in. nentInt (),
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 (" The roots are " + r₁ + "and" + v₂ ),
}
else if (d == 0)
{
    System. out. println (" Roots are real and equal ");
    r₁ = r₂ = -b / (2* a);
    System. out. println (" The root is " + r₁);
}
else {
    System. out. println (" Roots are imaginary");
}
}
}
```

⑩