

```
PROGRAM Kadai5_1
```

```
    IMPLICIT NONE
```

```
    DOUBLE PRECISION :: A, B, C, Discriminant, Root_1, Root_2
```

```
    PRINT *, "Enter the coefficients of A, B, C:"
```

```
    READ *, A, B, C
```

```
    Discriminant = B**2.0d0-4.0d0*A*C
```

```
    IF (Discriminant >= 0d0) THEN
```

```
        Discriminant = SQRT(Discriminant)
```

```
        Root_1 = (-B+Discriminant)/(2.0d0*A)
```

```
        Root_2 = (-B-Discriminant)/(2.0d0*A)
```

```
        PRINT *, "The roots are", Root_1
```

```
        PRINT *, "          ", Root_2
```

```
    ELSE
```

```
        PRINT *, "Discriminant is ", Discriminant
```

```
        PRINT *, "There are no real roots."
```

```
    ENDIF
```

```
END PROGRAM Kadai5_1
```