

FEBRUARY	M	T	W	T	F	S	S
	.	1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	.	.	.	.	.	.

22-01-2011

Saturday  
022-343 - Week 03

JANUARY

22

7. To find out the roots of a quadratic equation.

```
#include <stdio.h>
#include <conio.h> #include <math.h>
void main()
```

Appointments Meetings

```
{
float a, b, c, dis, r1, r2, real, imag;
clrscr();
```

```
printf("Enter the value of a, b, c");
```

```
scanf("%f %f %f", &a, &b, &c);
```

```
dis = b*b - 4*a*c;
```

```
if (dis == 0)
```

```
{
```

```
printf("The roots are equal\n");
```

```
r1 = (-b) / (2.0 * a);
```

```
}
```

```
elseif (dis < 0)
```

```
{
```

```
printf("The Roots are imaginary\n");
```

```
real = (-b) / (2.0 * a); dis = -dis;
```

```
imag = sqrt(dis) / (2.0 * a);
```

```
disc = (-disc);
```

```
printf("Root 1 = %.5f + i%.5f", real, imag);
```

```
printf("Root 2 = %.5f - i%.5f", real, imag);
```

```
exit(0);
```

```
}
printf("The Roots are real & unequal.");
```

```
r1 = (-b + sqrt(dis)) / (2.0 * a);
```

```
r2 = (-b - sqrt(dis)) / (2.0 * a);
```

```
}
```

The goal of all life is death

```
printf("Roots are %f and %f", r1, r2); getch(); }
```

$$ax^2 + bx + c = 0$$

$$\alpha, \beta = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

1.  $D = 0$

Both roots are real & equal.

2.  $D < 0$

Roots are imaginary.

3.  $D > 0$

Both roots are real & distinct.

else

```
{ printf("The Roots are real & unequal.");
```

```
r1 = (-b + sqrt(dis)) / (2.0 * a);
```

```
r2 = (-b - sqrt(dis)) / (2.0 * a);
```

```
}
```

```
printf("Roots are %f and %f", r1, r2); getch(); }
```

Sunday 23