Program 1:-

```c
#include <iostream.h>
#include <math.h>
#include <conio.h>
float area (int x, int y, int z)
{
float s, ar;
s = (x + y + z)/2;
ar = sqrt (s * (s-a) * (s - y) * (s-z));
return ar;
}

int main ()
{
int a, b, c;
clrscr();
printf ("Enter the sides of triangle");
scanf ("%d %d %d", &a, &b &c);
printf (" area of triangle is %f\n", area));
getch();
return 0;
}
```

Program 2:-

```c
#include <math.h>
#include <stdio.h>
int main()
{
double a, b, c, dis, root1, root2, real, img;
printf ("Enter the co.eff of a, b, c);
scanf ("%f %f %f", &a, &b, &c);
```

```c
dis = b*b - 4*a*c;
if (dis > 0)
{

root1 = (-b + sqrt (dis))/(2*a);
root2 = (-b - Sqrt(dis))/(2*a);
printf ("root1 = %.f, root2 = %.f", root1, root2);
}

else if (dis == 0)
{

root1 = root2 = -b/(2*a);
printf ("root1 = root2 = %.f", root1);
}

else
{

real part = -b/(2*a);
img = Sqrt(-dis)/(2*a);
printf ("root1 = %.1f + %.fi  and root2 =
        %.f - %.fi", real, img, real, img);
}

return 0;
}
```

Program 3.

```c
#include <stdio.h>
#include <conio.h>
float avg (int a, int b, int c)
{
float average;
average = (a+b+c)/3.0;
return average;
}
```

```c
void main()
{
int n1, n2, n3;
float avg;
clrscr();
printf("\ enter three numbers");
scanf("%d %d %d", &n1, &n2, &n3);
avrg = avg(n1, n2, n3)
printf("\n average of 3 numbers :%f", avg
getch();
clrscr();
}
```

Programe 4 :-

```c
#include <stdio.h>
int main()
{
int num1, num2, num3;
printf("Enter three numbers");
scanf("%d %d %d", &num1, &num2, &num
if (num1 < num2 && num1 < num3)
{
    printf("%d is smaller.", num1);
}

else if (num2 < num3 && num2 < num1)
{
    printf("%d is smaller", num2);
}
else {
    printf("%d is smaller", num3);
}
return 0; }
```