Q.1

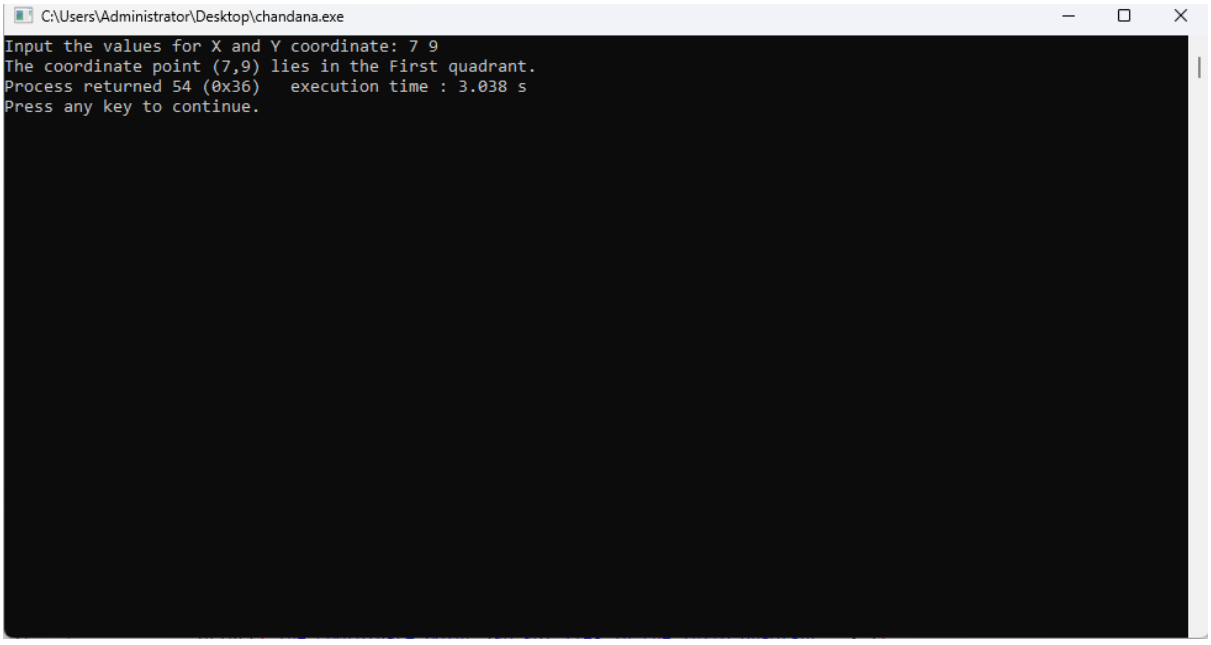
Task 1:

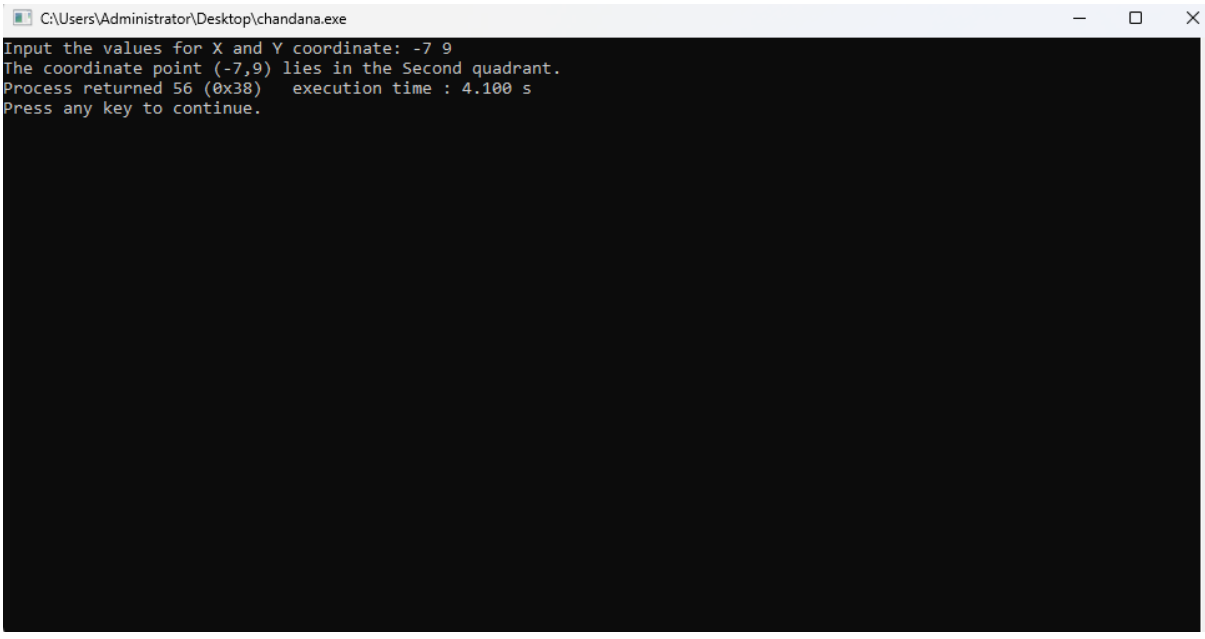
Code:

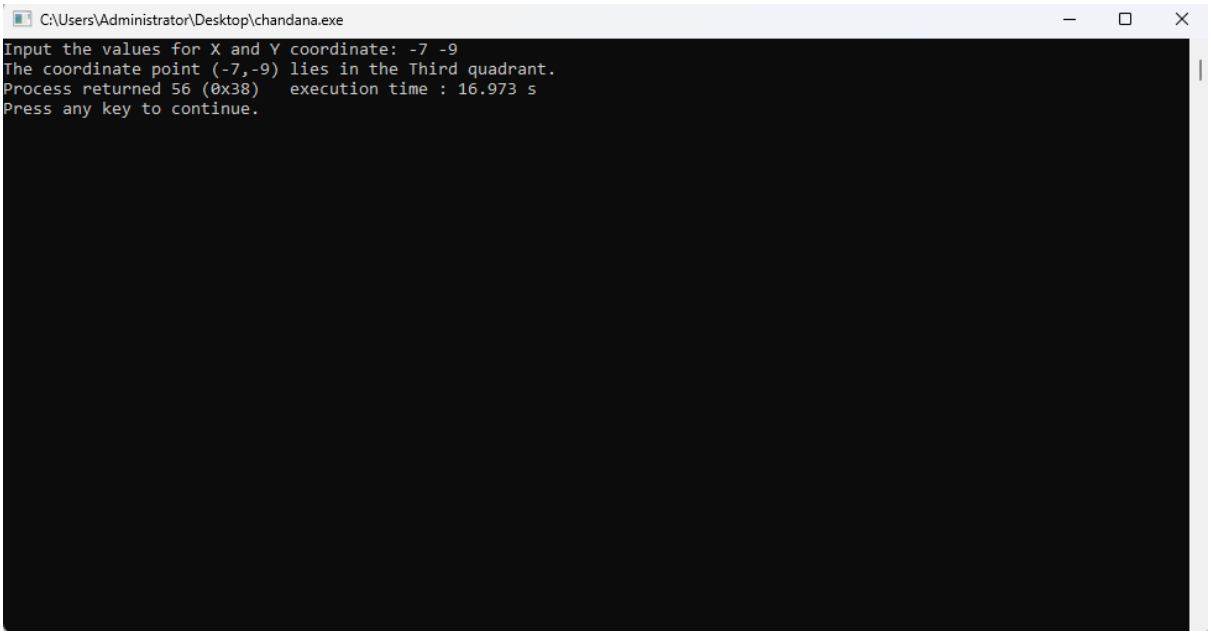
```
#include<stdio.h>
void main()
{
   int X,Y,quadrant;
   printf("Input the values for X and Y coordinate: ");
   scanf("%d %d",&X,&Y);
   if(X>0&&Y>0)
   {
      quadrant=1;
   }
   else if(X<0&&Y>0)
   {
      quadrant=2;
   }
   else if(X<0&&Y<0)
   {
      quadrant=3;
   }
   else
   {
      quadrant=4;
   }
   switch(quadrant)
   {
```

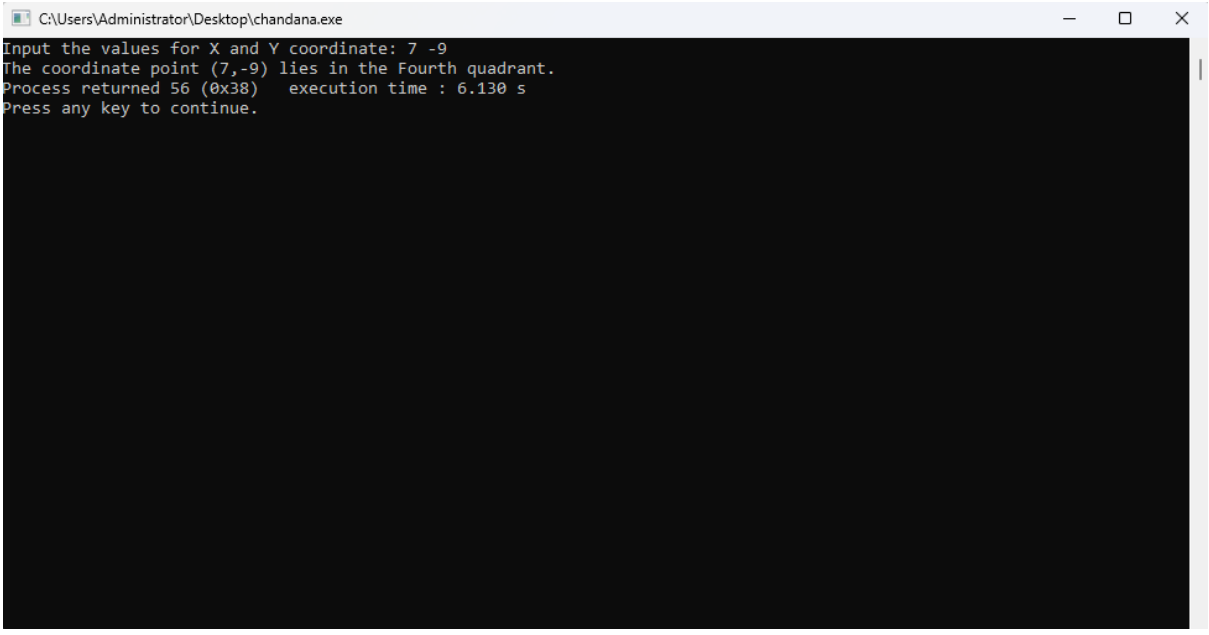
```
    case 1:
      {
         printf("The coordinate point (%d,%d) lies in the First quadrant.",X,Y);
      }
    break;
    case 2:
      {
         printf("The coordinate point (%d,%d) lies in the Second quadrant.",X,Y);
      }
    break;
    case 3:
      {
         printf("The coordinate point (%d,%d) lies in the Third quadrant.",X,Y);
      }
    break;
    case 4:
      {
         printf("The coordinate point (%d,%d) lies in the Fourth quadrant.",X,Y);
      }
    break;
    }
}
```

Output:


C:\Users\Administrator\Desktop\chandana.exe
Input the values for X and Y coordinate: 7 9
The coordinate point (7,9) lies in the First quadrant.
Process returned 54 (0x36)   execution time : 3.038 s
Press any key to continue.


C:\Users\Administrator\Desktop\chandana.exe
Input the values for X and Y coordinate: -7 9
The coordinate point (-7,9) lies in the Second quadrant.
Process returned 56 (0x38)   execution time : 4.100 s
Press any key to continue.


C:\Users\Administrator\Desktop\chandana.exe
Input the values for X and Y coordinate: -7 -9
The coordinate point (-7,-9) lies in the Third quadrant.
Process returned 56 (0x38)   execution time : 16.973 s
Press any key to continue.


C:\Users\Administrator\Desktop\chandana.exe
Input the values for X and Y coordinate: 7 -9
The coordinate point (7,-9) lies in the Fourth quadrant.
Process returned 56 (0x38)   execution time : 6.130 s
Press any key to continue.

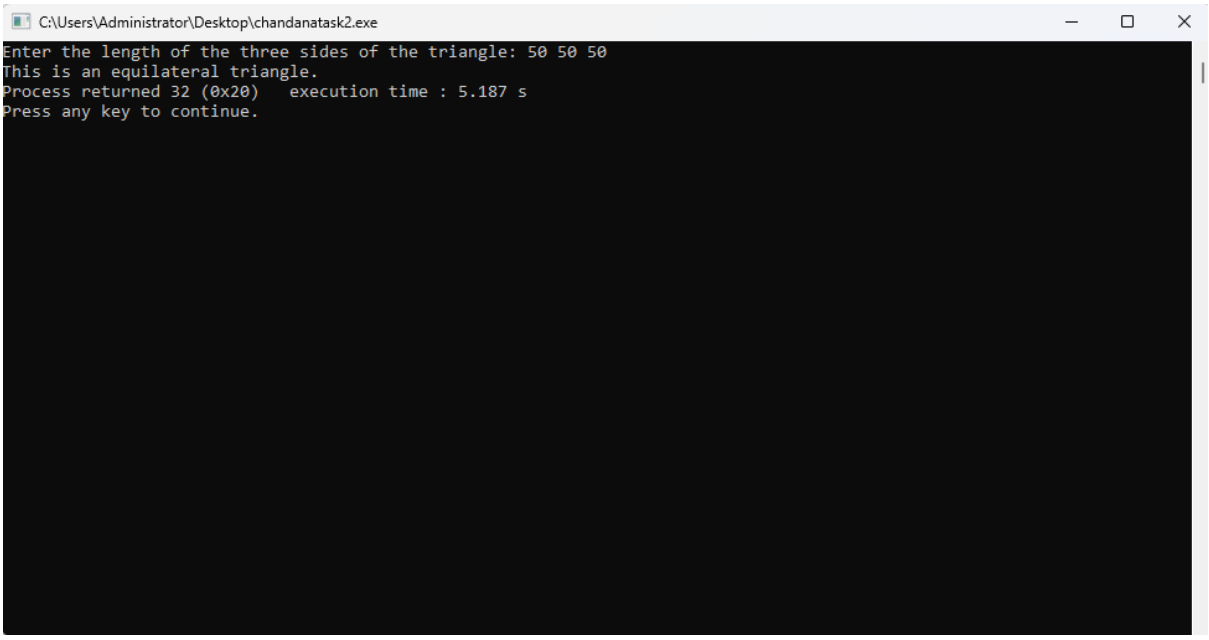
Task 2:

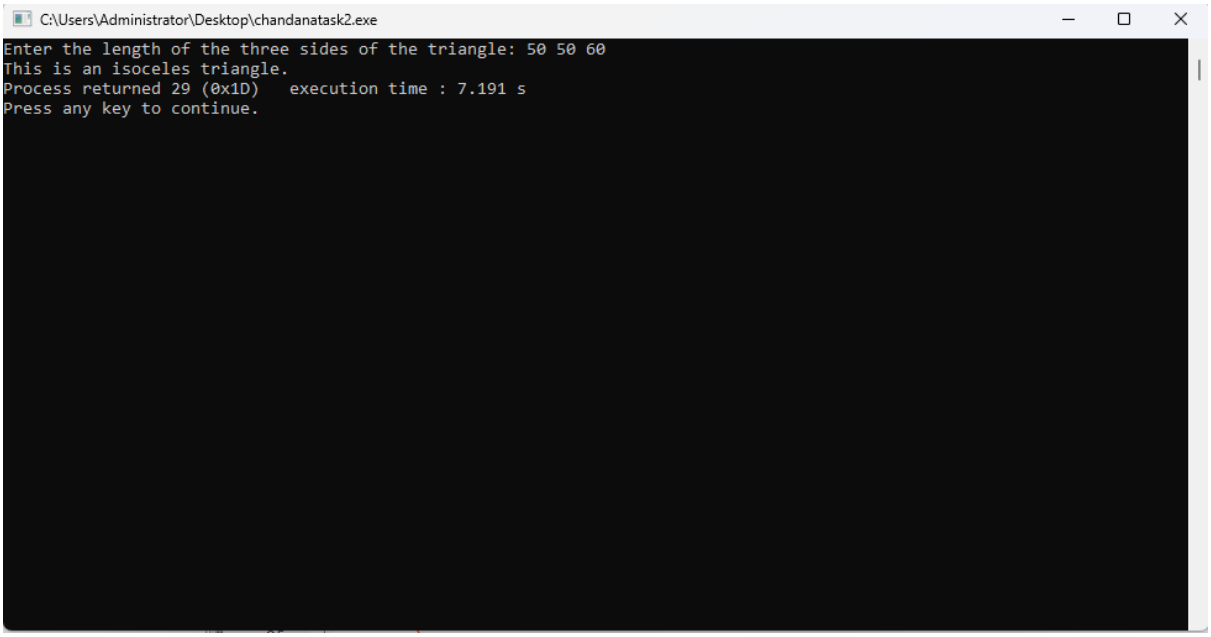
Code:

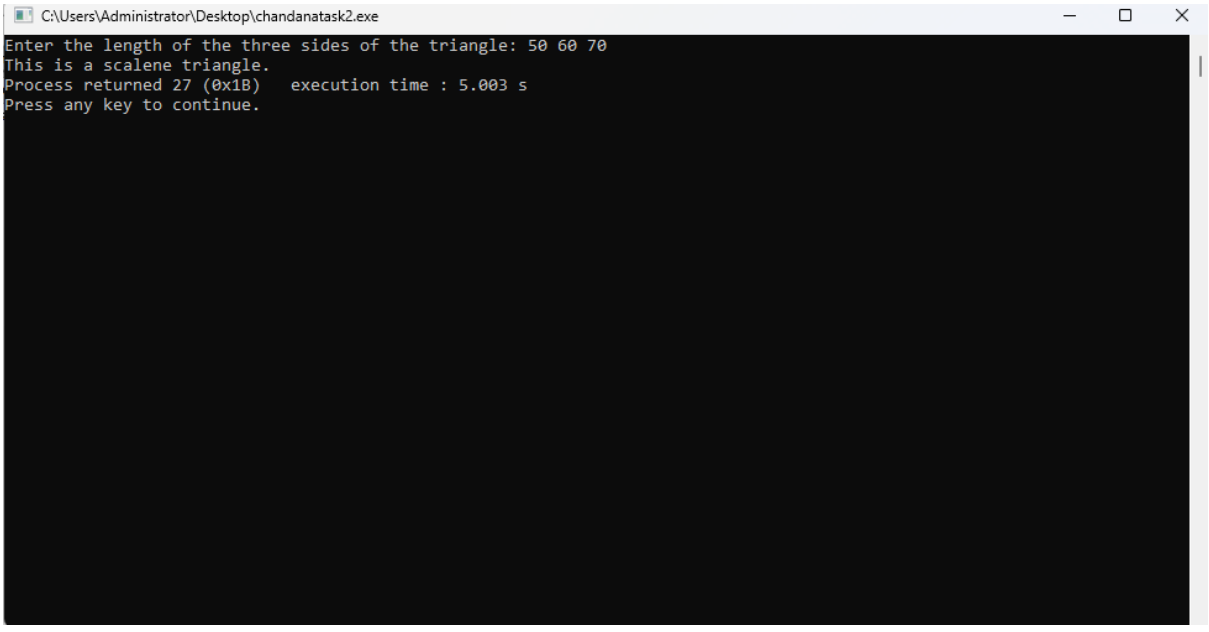
```
#include<stdio.h>
#include<math.h>
void main()
{
   int a,b,c,type;
   printf("Enter the length of the three sides of the triangle: ");
   scanf("%d %d %d",&a,&b,&c);
   if(a==b&&b==c&&c==a)
   {
      type=1;
   }
   else if(a!=b&&b!=c&&c!=a)
   {
      type=2;
   }
   else
   {
      type=3;
   }
   switch(type)
   {
   case 1:
      {
         printf("This is an equilateral triangle.");
      }
```

```
    break;
    case 2:
      {
        printf("This is a scalene triangle.");
      }
    break;
    case 3:
      {
        printf("This is an isoceles triangle.");
      }
    break;
    }
}
```

Output:




C:\Users\Administrator\Desktop\chandanatask2.exe
Enter the length of the three sides of the triangle: 50 50 60
This is an isoceles triangle.
Process returned 29 (0x1D)   execution time : 7.191 s
Press any key to continue.


C:\Users\Administrator\Desktop\chandanatask2.exe
Enter the length of the three sides of the triangle: 50 60 70
This is a scalene triangle.
Process returned 27 (0x1B)   execution time : 5.003 s
Press any key to continue.

Q.2

Code:

```
#include<stdio.h>

void main()

{

   int distance,velocity,acceleration,time;

   printf("Enter the time taken to cover the distance(in s): ");

   scanf("%d",&time);

   printf("\nEnter the velocity of the car(in m/s): ");

   scanf("%d",&velocity);

   printf("\nEnter the acceleration of the car(in m/s^2): ");

   scanf("%d",&acceleration);

   printf("\nThe distance covered by the car would be(in m):
%d",distance=(velocity*time)+(0.5*acceleration*pow(time,2)));

}
```

Output: