Editor - C:\Users\Rochelle Abalus\Documents\2ECEA\MAtlab\Final\Prob2.m

prob1.m | Prob2.m | Prob3.m | Prob4.m | Prob5.m

```
%'Input matrix in standard MATLAB format: '
Xa=input('Xa coordinate :');
Ya=input('Ya coordinate :');
Xb=input('Xb coordinate :');
Yb=input('Yb coordinate :');
Xc=input('Xc coordinate :');
Yc=input('Yc coordinate :');

%Point A-B
syms x y
if (Xb-Xa)==0
    %Equation
    f1=((Xa + Xb)/2)-x;
    NLm=0;

elseif (Xb-Xa)~=0
        NLm= (Xa-Xb)/(Yb-Ya);
        b=((Ya+Yb)/2)-((Xa-Xb)/(Yb-Ya))*((Xa+Xb)/2);
        %equation
        f1=NLm*x + b - y;
end
%Point B-C
if(Xc-Xb)==0
    %equation
    f2=((Xc-Xb)/2)-x;
    NLm=0;

elseif (Xc-Xb)~=0
    NLm=(Xb-Xc)/(Yc-Yb);
    b=((Yb+Yc)/2)-((Xb-Xc)/(Yc-Yb))*((Xb+Xc)/2);
    %equation
```

Workspace

Command Window

```
>> Prob2
Xa coordinate :2
Ya coordinate :0
Xb coordinate :0
Yb coordinate :2
Xc coordinate :-2
Yc coordinate :0

Center =

[ 0, 0]


RADIUS =

2


VECTOR =

[ 0, 0, -4]

fx >>
```