Challenge 1 - Big Dipper

By Grant Eyer

Create points to represent the big dipper. The first line represents the top half of the Big dipper.

```
xPointTop = [1,3,4,6,9.3];
yPointTop = [9,8.5,7,5,4];
```

Plots the top portion of the Big Dipper. Changes the color of the line to light blue, and the markers are white circles.

```
plot(xPointTop,yPointTop,'color',[0,.6,.8],'Marker','o',...
    'MarkerFaceColor','w','MarkerSize',5,'MarkerEdgeColor','none');
```

Gets the current axis object and turns off the visibility.

```
a = gca;
a.Visible = 'off';
```

Indicate that additional points will be placed on the same figure

```
hold on;
```

Creates points for the bottom of the Big Dipper Formation.

```
xPointBottom = [6,5.9,8.3,9.3];
yPointBottom = [5,3.5,2.5,4];
```

Plots the bottom half of the Big Dipper. Changes the color of the line to light blue, and the markers as white circles.

```
plot(xPointBottom,yPointBottom,'color',[0,.6,.8],'Marker','o',...
    'MarkerFaceColor','w','MarkerSize',5,'MarkerEdgeColor','none');
```

Add several randomly uniformly points to the graph as pentagrams to represent the stars in the night sky

```
scatter(10*rand(5,20),10*rand(5,20),'filled','Marker','pentagram',...
    'MarkerEdgeColor','none','MarkerFaceColor','w');
```

Print centered title of drawing titled "Big Dipper Constellation by Grant Eyer"

```
fprintf("\t\t\tBig Dipper Consellation by Grant Eyer")
```

```
            Big Dipper Consellation by Grant Eyer
```

Gets the current figure and changes the background color to dark blue to simulate the nighttime.

```
s = gcf;
s.Color = [0,0,.15];
```