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%{  
Josh Tozer & Nathan Willson  
CS 2300 002  
Project 2  
Fri Oct 11, 2019 at 11:59 pm  
This assignment will use a file that contains target box lower left coordinate,  
target box size, and information describing a line in parametric form. Using ✓  
this  
information, we will plot the line using character output and will create a ✓  
target  
box from the implicit form of the line. We will do this graphically.  
%}
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%Outputs name and assignment number.  
disp('Josh Tozer & Nathan Willson')  
disp('Project 2')
```

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%Gets the numbers from the text file and saves the target box lower left ✓  
coordinate,  
%target box size, and information describing a line in parametric form.  
data = dlmread('line4.txt');  
target_box = data(1:2);  
box_size = data(3);  
point = data(4:5);  
vec = data(6:7);
```

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%Uses the parametric equation of a line to display the line to the user.  
hold on;  
t = linspace(-box_size/2, box_size/2);  
v = point(1) + t * vec(1);  
w = point(2) + t * vec(2);  
plot(v,w, 'Color', 'b', 'LineStyle', ':');
```

```
%Creates a rectangle that displays the target box.  
rectangle('Position',[target_box(1), target_box(2), box_size, box_size], ✓  
'EdgeColor','r', 'LineStyle','--');
```