In this lab you will use PowerPoint to create a poster to showcase the work you’ve done in other labs and homework. To do this you will need a few basic PowerPoint skills.

**A. Setting the Size of the Poster**
We are creating an actual poster of your work that can be printed out. Posters are supposed to be big! So the first step in the process is setting the size of your poster

**Step 1:**
Open PowerPoint 2016 through the Start menu. Choose **Blank Presentation.** Save this file as **Lab9.pptx** in your **Lab9** folder (which is in your CSE3 folder).

**Step 2:**
1. Click on the Design tab
2. Click on the Slide Size button in the Customize tab
3. Enter **56** for the Width
4. Enter **48** for the Height
5. Select OK

**B. Inserting A Shape**
Shapes are the basic building blocks of PowerPoint. They are what give your poster its unique look. Shapes are nice because you can customize their size, color and position. You can also add text to shapes by double clicking on them and combine several shapes to make unique patterns. Be sure to experiment to make your poster look cool. And don’t forget that you can set the background image of your poster.
To insert a shape:

1) Select the Insert tab
2) Click on the Shapes button
3) Select a shape
4) Place and size your shape on the slide

C. Taking and Inserting a Picture

Your poster should contain descriptions of your work as well as pictures of the work you’ve done throughout the course. Microsoft PowerPoint allows you to take a screen shot of whatever is currently on your screen by using the Screenshot tool.
To create an image:

1) First open the document that you want to take a picture of and maximize it so that it fills up the entire screen.

2) Under the PowerPoint 'Insert' tab, select 'Screenshot'

3) To capture the whole screen, select the desired screen (all open windows will appear as options)

4) To capture a portion of a screen, select 'Screen Clipping'. This will grey out your screen and allow you to click and drag to select the area of the screen you want to capture, and automatically insert it as an image into your PowerPoint

D. Grouping and Ungrouping Objects

Sometimes, there are several different objects that you would like to move around together without having to select each one individually. In this case, it is very convenient to first “group” all the objects together. Once all objects are grouped, you can treat all objects inside of the group just like a single object – this means you can move them around, or even copy/paste all objects within the group like a
single entity. In this section, we are going to group all of the objects that you created in section D so that it is easy to position and move around.

1. Select the first shape or object. Then, hold down CTRL while selecting all of the remaining shapes or objects that you want to group with the first object.

2. Under **Drawing Tools**, on the **Format** tab, in the **Arrange** group, click 📊, and then click **Group** 📊.

![Drawing Tools and Format Tab](image)

(If you do not see the **Drawing Tools** or **Format** tabs, make sure that you selected a shape or other object. You might have to double-click the object to open the **Format** tab.)

Inevitably, you may want to ungroup objects again so that you can pull out or edit individual parts. Let’s practice ungrouping the objects that we just grouped together:

1. Select the group that you want to ungroup.
2. Under **Drawing Tools**, on the **Format** tab, in the **Arrange** group, click **Group**, and then click **Ungroup**.

![Arrange Group Options](image)

Now the objects are all separate entities again that you can move and edit. When designing your poster, it will be convenient to “group” together all of the objects in a box, copy and then paste it (so you now have two copies of the box). On the second copy of the box, you can then “ungroup” and edit individual objects with new text and pictures in order to create another box, but with the same style.

**E. Screen Shot of Pycharm IDE (Integrated Development Environment)**

To create a screenshot of the Pycharm IDE:

1) First open the Homework #6 Pycharm file. Run the code.

2) Repeat Step C) above with the PowerPoint Screenshot tool to take a screen shot of the graphical image of your Pycharm IDE.
**F. Checkoff**

We’ve given the basic tools to create your own poster. It is up to you to use these tools to make something cool. When you are done your poster should have modules that correspond to the different labs that you have created this quarter. Please use the following headers for your modules (but ignore the text inside the brackets -- this text is just for you to know which lab to pull information from):

1) **Computational Thinking** [Introduction/Course Overview]
2) **Making Information Available to the World with HTML and Web Pages** [Lab #1, #3, Homework #2, #3 – Part 3]
3) **Desktop Publishing with MS Word** [Lab #2]
4) **Presentation of Information with MS PowerPoint** [Homework #5]
5) **Data Analysis and Visualization with MS Excel** [Lab #4, Homework #5]
6) **IDE (Integrated Development Environment) Programming with Python** [Lab #5-6, Homework #6]
7) **Dynamic Webpage Programming with JavaScript** [Lab #7-8, Homework #7-8]

Your poster should look something like this (but with the headers described above):

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**Check off List**

1) Shapes with text that describe what you’ve created this quarter
2) Screen shots of your work
3) Use multiple colors
4) Make it look nice!