




(50 pts) Approx. 2 days

The first part of our unit requires that you make a choice for what you want to work on as our semester wraps up, and that you create a good plan for making progress! It all starts by choosing a project. While some of your classmates in other courses might be building something, we need to stick with *making a program*. Some ideas of each are listed below to get you thinking:

<i>Fun Programs</i>		<i>Helpful Programs</i>	
Text-Based Adventure	4x4 Tic-Tac-Toe	Physics Calculator	Chemistry Calculator
Checkers	Connect 4	Favorite Music Catalog	Dictionary

1. **Brainstorming:** Brainstorm ten (10) ideas for possible project topics or things to learn about.
2. Pick the idea you want to work on. If you think it's a pretty wild or big idea, double check with Mr. Benshoof to make sure we've covered the information you'll need to make that program!
3. **Design Brief:** Next, make complete design brief in your engineering notebook! Your design brief must outline what you're trying to accomplish and what will make it a success. Remember that a complete design brief has to include the following 5 ideas:
 - a. Problem Statement & Justification
 - b. Deadlines
 - c. Criteria
 - d. Constraints
 - e. Audience/Scope
4. **GANTT Chart:** Finally, you need to make a plan for completing your work. Start with a GANTT chart to plan out your work between now and the end of the semester!
5. **Diagram & Plan:** Next, make a plan for what you're going to do based on what you want to do:
 - a. **For the program you want to build:** Create a diagram of the class organization you think would be best. Should you have classes for Pandas and Lions? For Caves and Beaches? Will you only need one class? What methods will be helpful? **Write down** your ideas in your engineering notebook.

<i>Part 1: Tasks</i>	<i>10 points</i>	<i>9-5 points</i>	<i>4-0 points</i>
 Project Brainstorm	+ You brainstormed 10 ideas for different projects	- You brainstormed between 5 and 9 ideas for different projects	- You brainstormed fewer than 5 ideas
	<i>20-17 points</i>	<i>16-10 points</i>	<i>9-0 points</i>
 Design Brief	+ Your design brief is complete, including all 5 of the necessary parts + Your design brief is specific to you in this project	- Your design brief is missing a component - Your design brief is generic and does not apply to you specifically	- Your design brief is missing more than one component - Your design brief is missing
 Diagram & Plan	+ Your plan includes a GANTT chart + Your plan includes a picture of how you'll organize classes and methods	- Your plan does not include a GANTT chart - Your plan does not include a picture	- Your plan is missing

