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Project Overview:
The point of the project is to create a simple shell. This shell is meant to listen to commands the user will input into it.

Code Notes:

- Cat takes in one parameter that is passed on the command line.
- Arg v, arg c, functions similarly.
- PWD allows you to check your directory
- Assert() allows you to check if something is written or wrong.
- Added if command to line 31 in case of error.
- Debugged line 49 and 13 and made shell
- Changed Prompt to '/home/codio/workspace>'
- After the shell was completed, the ./shell command was used
- Created command meant to tokenize command line
- Began building the built in commands into the shell
    - Code already began to recognize some commands such as cd and pwd.
- Implemented the cd command officially.
- Implement pwd command officially via having the function call the prompt in the while loop
- Established Echo, utilizing the while loop from the tokenized command
- After some testing env and setenv were successfully established and tested.
- Created child process and function for the code.
- Created and changed the parent process so the function would be able to stop and resume when the child function was completed.
- Began debugging of the code

Review

The project involved creating a shell program and various functions in C code. Said functions included the pwd, cd, echo and env functions. Each function was implemented via the makefile, and tested via the terminal. The code was built off the first 4 tasks and involved inputting and creating each function based on their purposes. The final two functions were meant to act as a parent and child function, where the child function would run as long as possible, before stopping. After that function was completed, the parent function would continue to run.

To create the function, the first step was to utilize the foundation of the shell, and build the other shell functions. Once the shell was created, the first function that was added was the pwd and cd functions. Pwd established a directory while cd was meant to allow the user to change into a different directory. The echo function allowed the user to print a word based on what was imputed. While there was a brief error in the code, some debugging seemed to resolve the error.

Reflection

A major issue I struggled with in  this project was my lack of understanding of C code. While resources proved by the teacher and found on the internet helped me, along with my understanding of coding structure, a majority of the bugs I found in my code were often found due to my lack of understanding with C code. If I were to redo or improve the project, my focus would be to better understand the coding language and take time to  outline the needs of the project. With that in mind, I would be better able to use C code to build functions based on those needs.