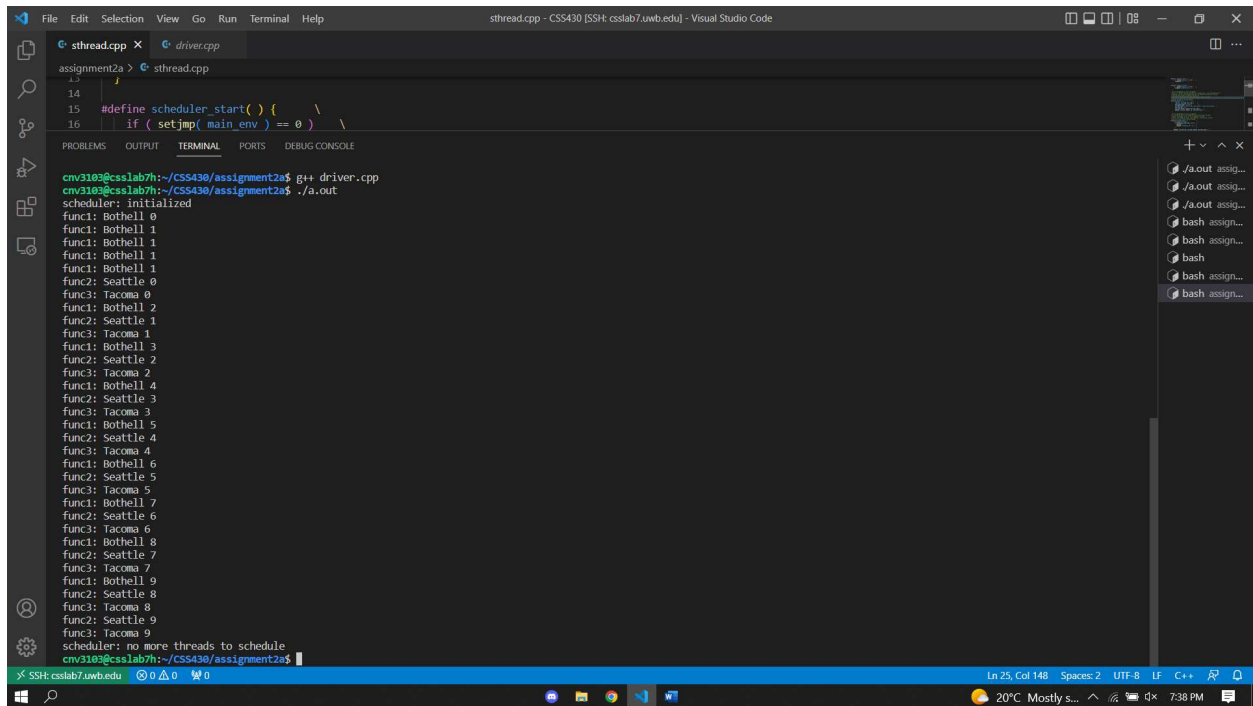


Screenshots attached below are the output of my program assignment and the illustration of stack layers.



```
File Edit Selection View Go Run Terminal Help
sthread.cpp - CSS430 [SSH: csslab7.uwb.edu] - Visual Studio Code

sthread.cpp
assignment2a > sthread.cpp
14
15 #define scheduler_start() { \
16     if ( setjmp( main_env ) == 0 ) \

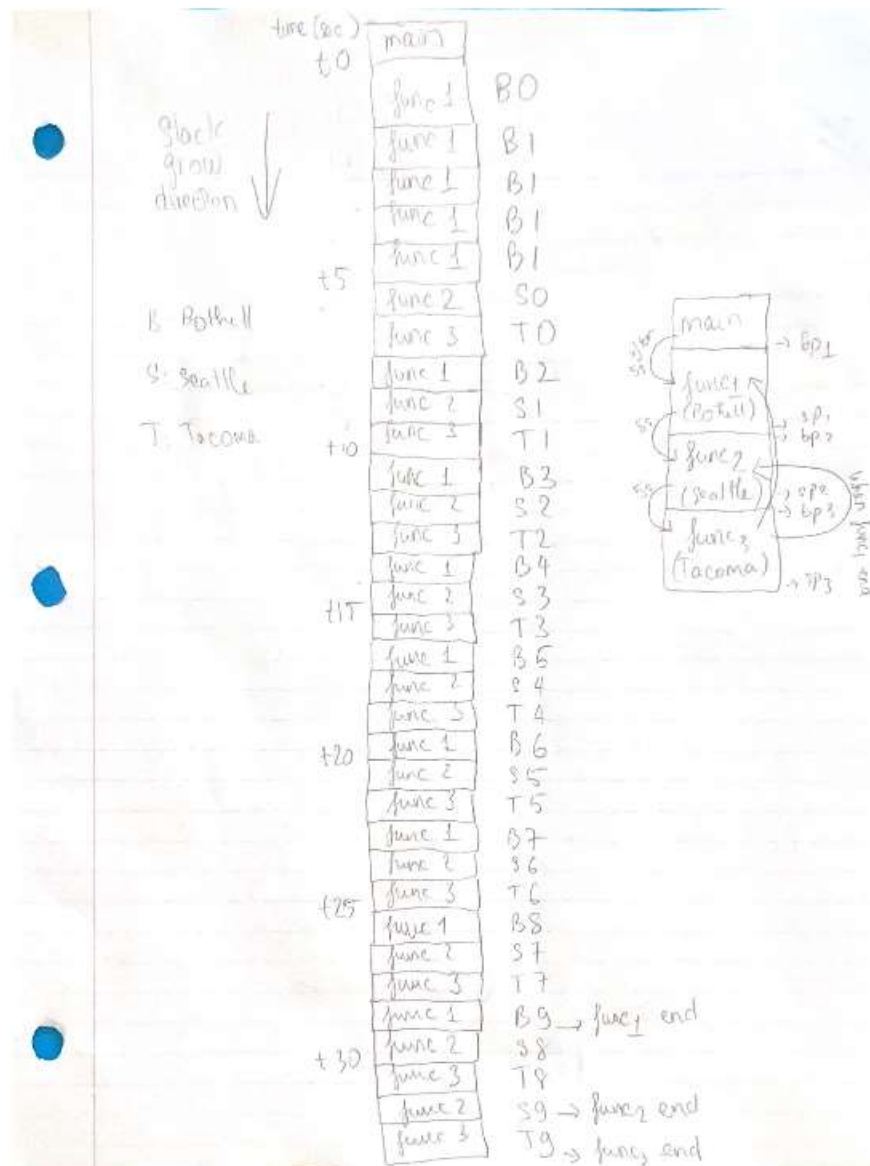
PROBLEMS OUTPUT TERMINAL PORTS DEBUG CONSOLE

css3103@csslab7h:~/CSS430/assignment2a$ g++ driver.cpp
css3103@csslab7h:~/CSS430/assignment2a$ ./a.out
scheduler: initialized
func1: Bothell 0
func1: Bothell 1
func1: Bothell 1
func1: Bothell 1
func1: Bothell 1
func2: Seattle 0
func3: Tacoma 0
func1: Bothell 2
func2: Seattle 1
func3: Tacoma 1
func1: Bothell 3
func2: Seattle 2
func3: Tacoma 2
func1: Bothell 4
func2: Seattle 3
func3: Tacoma 3
func1: Bothell 5
func2: Seattle 4
func3: Tacoma 4
func1: Bothell 6
func2: Seattle 5
func3: Tacoma 5
func1: Bothell 7
func2: Seattle 6
func3: Tacoma 6
func1: Bothell 8
func2: Seattle 7
func3: Tacoma 7
func1: Bothell 9
func2: Seattle 8
func3: Tacoma 8
func2: Seattle 9
func3: Tacoma 9
scheduler: no more threads to schedule
css3103@csslab7h:~/CSS430/assignment2a$
```

- I got to the point where I had the segmentation fault error and then based on professor's Yang Peng's hint, I figured out that the stack is default to be NULL, that's why its address is invalid.
- Hence, I tried to point the stack (a temporary space to maintain the latest stack contents) to the destination and I was able to avoid the segmentation error.
- I also think of pushing the cur\_tcb into the current active thread queue thr\_queue and execute them.

Above was the process of thinking while I was doing the coding part.

Below is the illustration of how I understand the stack layers and the RR algorithm.



- We can clearly see the pattern that repeats which represent the quantum for the RR algorithm.
- Capture() will save the process to a temporary space while the next func in queue get to run.
- After all three functions arrive then they will run when it gets to their turn
- Each func will need to be called 10 times (0-9) and it is represented by the number after Bothell, Seattle, Tacoma.