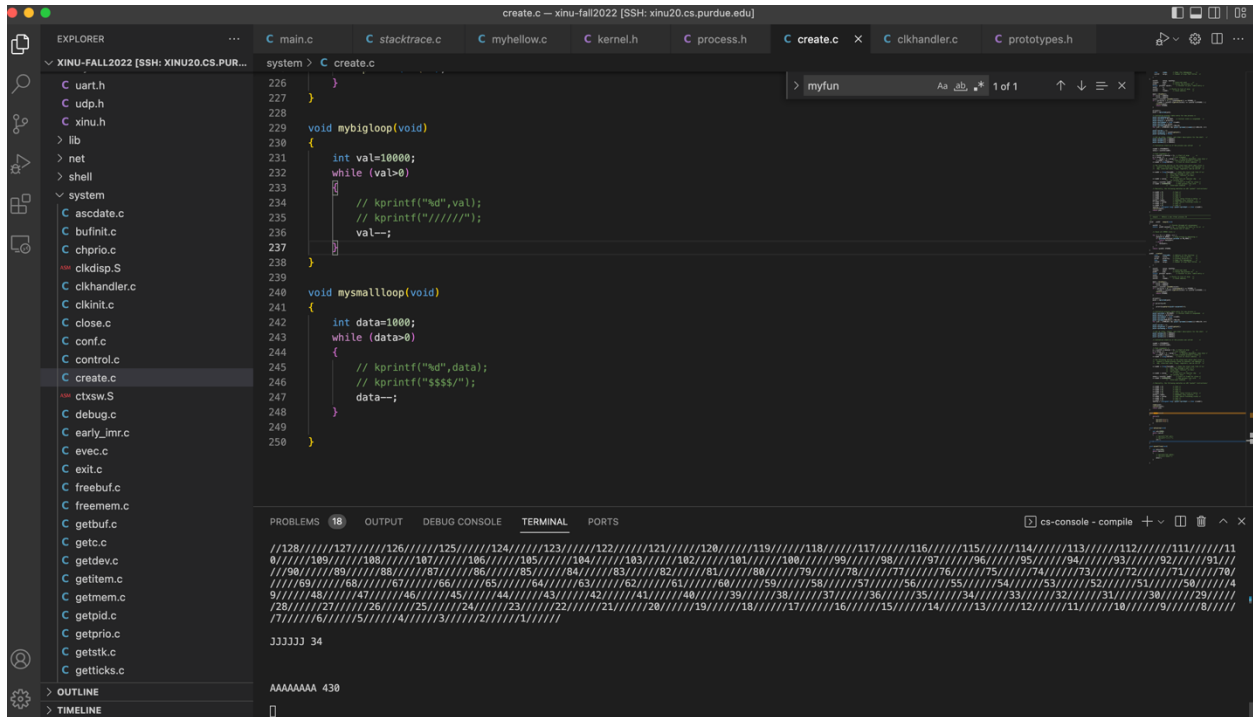


Operating System

3.3) Time slice Management

I designed 2 loops mysmallloop() and mybigloop().



```
create.c -- xinu-fall2022 [SSH: xinu20.cs.purdue.edu]
EXPLORER
  XINU-FALL2022 [SSH: XINU20.CS.PUR...
    C uart.h
    C udp.h
    C xinu.h
    > lib
    > net
    > shell
    > system
      C ascdate.c
      C bufinit.c
      C chprio.c
      C clkdisp.S
      C clkhandler.c
      C clkinit.c
      C close.c
      C conf.c
      C control.c
      C create.c
      C ctsw.S
      C debug.c
      C early_imr.c
      C evec.c
      C exit.c
      C freebuf.c
      C freemem.c
      C getbuf.c
      C getc.c
      C getdev.c
      C getitem.c
      C getmem.c
      C getpid.c
      C getprio.c
      C getsik.c
      C getticks.c
    > OUTLINE
    > TIMELINE

system > C create.c
226 }
227 }
228
229 void mybigloop(void)
230 {
231     int val=10000;
232     while (val>0)
233     {
234         // kprintf("vd",val);
235         // kprintf("/////");
236         val--;
237     }
238 }
239
240 void mysmallloop(void)
241 {
242     int data=1000;
243     while (data>0)
244     {
245         // kprintf("vd",data);
246         // kprintf("$$$$");
247         data--;
248     }
249 }
250 }

PROBLEMS 18 OUTPUT DEBUG CONSOLE TERMINAL PORTS
cs-console - compile + - - - - -
//128/////127/////126/////125/////124/////123/////122/////121/////120/////119/////118/////117/////116/////115/////114/////113/////112/////111/////110/////109/////108/////107/////106/////105/////104/////103/////102/////101/////100/////99/////98/////97/////96/////95/////94/////93/////92/////91/////90/////89/////88/////87/////86/////85/////84/////83/////82/////81/////80/////79/////78/////77/////76/////75/////74/////73/////72/////71/////70/////69/////68/////67/////66/////65/////64/////63/////62/////61/////60/////59/////58/////57/////56/////55/////54/////53/////52/////51/////50/////49/////48/////47/////46/////45/////44/////43/////42/////41/////40/////39/////38/////37/////36/////35/////34/////33/////32/////31/////30/////29/////28/////27/////26/////25/////24/////23/////22/////21/////20/////19/////18/////17/////16/////15/////14/////13/////12/////11/////10/////9/////8/////7/////6/////5/////4/////3/////2/////1/////
JJJJJJ 34
AAAAAAA 430
[]
```

The lifetime of the small loop is 34. The lifetime of bigger loop which is 10 times bigger than the small loop is 430 which is approximately 10 times of 34. Hence, we can verify the functioning of the time-slice counter.

3.1) As soon as process ends. Kill is called. Kill removes the entry form NPROC table and sets the prstate to PR_FREE. It also closes the ports and . POPed the entry form the stack.