Github: https://github.com/RPDubey/APES_proj1

Screenshot of program running

```
ravi@ravi-VirtualBox:~/APES/APES_proj1$ sudo ./main.elf
[sudo] password for ravi:
Logfile name set to logfile.txt
Enter Temp Format 0.CELCIUS 1.FARENHEIT 2.KELVIN
Entering Main- PID:7410
LogTask Sigmask:Success
Log Task-mq_open-notify_mq Success
LogTask-mq_open-loggerQ Success
Log Task-fopen Success
##All elements initialized in Log Task, proceeding with it##
lightTask-mq_open-notify mq:Success
lightTaskpthread_mutex_initSuccess
lightTask-mq_open-loggerQ Success
lightTask-mq_open-IPCQ Success
LightTask sigaction Success
LightTask pthread_sigmask Success
lightTask-setLightTimer Success
##All elements initialized in Light Task, proceeding with it##
Temp Task mq_open-notify_mq Success
Temptask-setTempTimer Success
Temptask-pthread_mutex_init:Success
Temp Task-mq_open-loggerQ Success
Temptask-mq_open-IPCQ Success
Temp task-pthread_sigmask Success
##All elements initialized in Temp Task, proceeding with it##
SocketTask-mq_open-notify mq Success
SocketTask-mq_open-logger mq Success
SocketTask-socket Success
SocketTask-setsockopt Success
SocketTask-bind Success
SocketTask-pthread_sigmask Success
SocketTask-listen Success
##All elements initialized in Socket Task, proceeding with it##
************
 Enter thread to close 1-temp 2-light 3-log 4-socket 5-application
*****************
```

MLTIS*

Screenshot for CMOCKA Tests:

```
1 FAILED TEST(S)
ravi@ravi-VirtualBox:~/APES/APES_proj1/cmocka$ sudo ./tests
[sudo] password for ravi:
[=======] Running 4 test(s).
          ] positive_temp_conv_test
RUN
Testing C,F,K conversion
       OK ] positive temp conv test
          ] negative_temp_conv_test
[ RUN
Testing C,F,K conversion
       OK ] negative temp conv test
[ RUN
          ] light_conv_test
       OK ] light conv test
          ] socket_task_test
[ RUN
       OK ] socket_task_test
[======] 4 test(s) run.
[ PASSED ] 4 test(s).
ravi@ravi-VirtualBox:~/APES/APES_proj1/cmocka$
```

Software architecture

