STEPS OF EXECUTION

COMPILATION:
make clean
make all
gcc -m64 video_proc.o -L/opt/liblitmus -llitmus -lSDL -lavformat -lavcodec
-lswscale -lswresample -lavutil -lm -lpthread -o video_proc

EXECUTION:
./video_proc

SCHEDULE TRACE:
mkdir <directory_name>
cd <directory_name>
st-trace-schedule   &   Hit enter to stop
st-draw *.bin
st-job-stats *.bin | head
evince *.pdf   or   View on preview
On another tab, run the program you want after starting the trace
Multiple tests → Navigate to the respective folder
rm *   ls
Then, above commands

FIND & KILL TASKS:
ps -ef
ps -ef | grep video_proc
kill -9 <task_id>

SET & SWITCH SCHEDULERS:
showsched
setsched <scheduler_name>

EVALUATION METRICS:

CASE	CONSTRAINTS	VALUES (Period, WCET, Deadline)
1	WCET < Period & DL > Period	17.5, 10, 100
2	WCET > Period & DL > Period	17.5, 20, 100
3	WCET = Period & DL > Period	17.5, 17.5, 100
4	WCET > Period & DL < Period	17.5, 20, 15
5	WCET < Period & DL < Period	17.5, 10, 15
6	WCET = Period & DL < Period	17.5, 17.5, 15
7	WCET < Period & DL = Period	17.5, 10, 17.5
8	WCET > Period & DL = Period	17.5, 20, 17.5
9	WCET = Period & DL = Period	17.5, 17.5, 17.5
10	WCET > Period & DL > WCET	17.5, 20, 50
11	WCET < Period & DL > WCET	17.5, 15, 50
12	WCET = Period & DL > WCET	17.5, 17.5, 50
13	WCET > Period & DL < WCET	17.5, 20, 15
14	WCET < Period & DL < WCET	17.5, 15, 10
15	WCET = Period & DL < WCET	17.5, 17.5, 15
16	WCET > Period & DL = WCET	17.5, 20, 20
17	WCET < Period & DL = WCET	17.5, 15, 15
18	WCET = Period & DL = WCET	17.5, 17.5, 17.5

	SPECIAL CASES	(PERIOD, WCET, DEADLINE)
A1	Too high periods	25, 10, 100
A2		50, 10, 100
A3		75, 10, 100
Period increases → Lag increases		
B1	Too low periods	15, 10, 100
B2		10, 10, 100
B3		5, 10, 100
Period decreases → Fast frame movement, Audio slower than frames		
C1	Too high deadlines	17.5, 10, 125
C2		17.5, 10, 150
C3		17.5, 10, 175
Deadline increases → Too loose restrictions, never fails		
D1	Too low deadlines	17.5, 10, 15
D2		17.5, 10, 10
D3		17.5, 10, 5
Deadline decreases → Too tight restrictions, fails most of the time		
E1	Too high WCET	17.5, 25, 100
E2		17.5, 50, 100
E3		17.5, 75, 100
WCET increases → Execution time > period/deadline. Always fails		
F1	Too low WCET	17.5, 15, 100
F2		17.5, 10, 100
F3		17.5, 5, 100
WCET decreases → Works less often		

EVALUATION RESULTS:

CASE	SPECIAL CASES - VIDEO			
	GSN-EDF	**PSN-EDF**	**C-EDF**	**P-FP**
A1	Done	Error	Done	Done
A2	Done	Error	Done	Done
A3	Done	Error	Done	Done
B1	Done	Error	Done	Error
B2	Done	Error	Done	Error
B3	Error	Error	Error	Error
C1	Done	Done	Done	Done
C2	Done	Done	Done	Done
C3	Done	Done	Done	Done
D1	Done	Done	Done	Done
D2	Done	Error	Done	Error
D3	Error	Error	Error	Error
E1	Error	Error	Error	Error
E2	Error	Error	Error	Error
E3	Error	Error	Error	Error
F1	Done	Done	Done	Error
F2	Done	Error	Done	Error
F3	Done	Error	Done	Error

CASE	OBSERVATIONS - VIDEO			
	GSN-EDF	**PSN-EDF**	**C-EDF**	**P-FP**
1	Done	Done	Done	Done
2	Error	Error	Error	Error
3	Done	Done	Done	Done
4	Error	Error	Error	Error
5	Done	Error	Done	Done
6	Error	Error	Error	Error
7	Done	Done	Done	Done
8	Error	Error	Error	Error
9	Done	Error	Done	Error
10	Error	Error	Error	Error
11	Done	Done	Done	Error
12	Done	Done	Done	Error
13	Error	Error	Error	Error
14	Error	Error	Error	Error
15	Error	Error	Error	Error
16	Error	Error	Error	Error
17	Done	Done	Done	Done
18 = 9	Done	Error	Done	Error