

Problem 1:

1. Tag 1 creates an integer variable called int_var. Tag 2 closes the file my_file_pointer that has been opened.
4. No, I did not get a negative time.
5. No, there does not exist a change.
6. The structure of timeval contains the time in seconds which is an int. struct is a standard data type because even c++ contains it and therefore is not platform specific.

Problem 3:

Sensors											Actuators			
S.N o	DO S	DSB F	E R	D C	KIC	DLC	B P	CM	P S	HSC D	BELL	DLA	BA	PAA
1	X	F	I	X	X	X	X	X	X	X	I	X	X	X
2	X	X	I	F	X	X	X	X	X	X	I	X	X	X
3	X	I	I	I	X	X	X	X	X	X	F	X	X	X
4	X	X	F	X	X	X	X	X	X	X	F	X	X	X
5	F	X	X	X	I	I	X	X	X	X	X	F	X	X
6	I	X	X	X	I	I	X	X	X	X	X	I	X	X
7	X	X	X	X	X	X	I	I	X	X	X	X	I	X
8	X	X	X	X	X	X	I	F	X	X	X	X	F	X
9	X	X	X	X	X	X	F	I	X	X	X	X	F	X
10	X	X	X	X	X	X	X	X	I	I	X	X	X	I
11	X	X	X	X	X	X	X	X	F	I	X	X	X	F
12	X	X	X	X	X	X	X	X	F	F	X	X	X	F

Problem 5:

3. The solution in problem 4 runs faster as we are using less variables therefore less storage space is needed. The lines that are to be run in problem 4 are lesser than problem 3 and therefore runs faster.