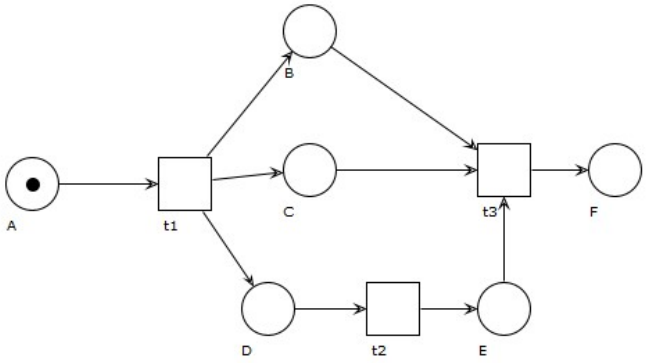
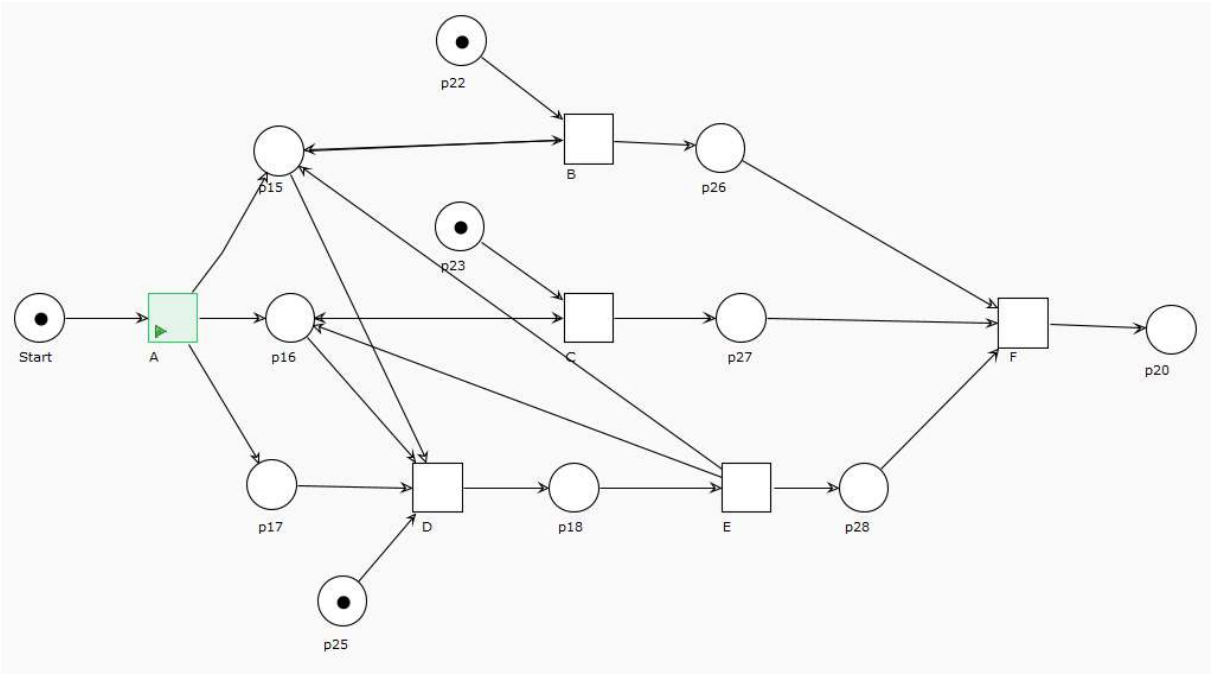
Group members: Thomas Auer, Larissa Krainer, Kristina Liebhart

Exercise 1:

1)



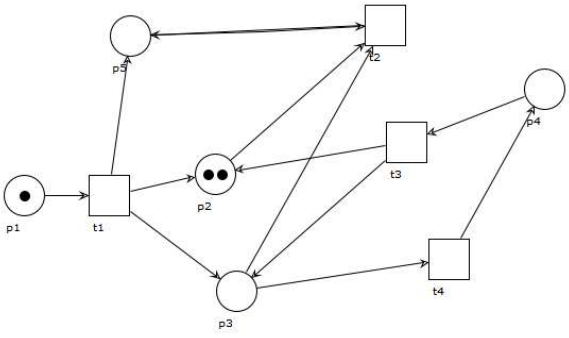
2)



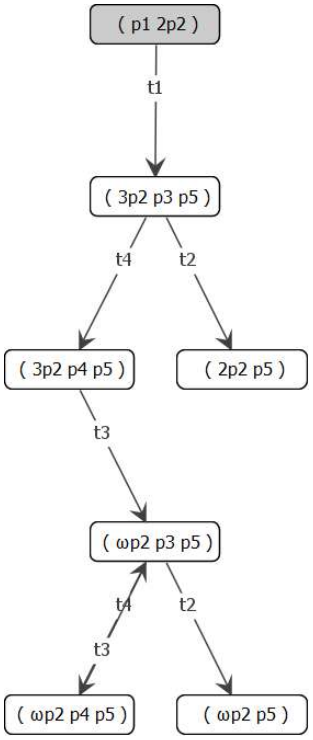
We decide to use A,B,C,D,E and F as transitions and not as places, because in the description they were specified as tasks.

Exercise 2

1)



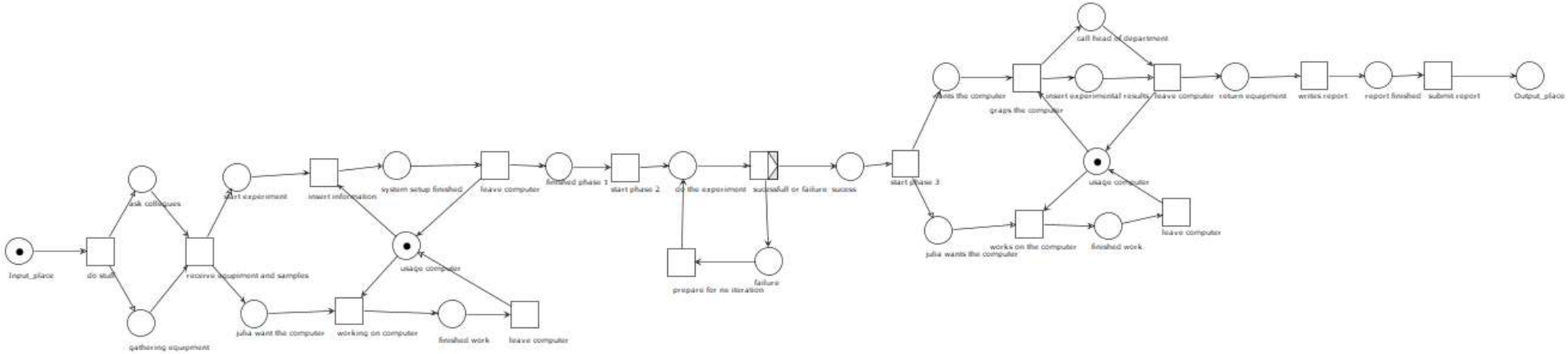
2)



3) Boundedness: Because the whole petri net could be infinite, so it is unbounded
   Safeness: The petri net is unsafe because it is not 1-bounded
   Conservativeness: It is not (strictly) conservative because the amount of tokens is infinite (not constant)
   liveness: t1 = L1-live, t3 and t4 = L3-live and t2 = special case, it can be dead L0-live or almost L1-live, but I depends on the firing sequence

4) T2 is our special case, it could be dead, but it depends on which firing sequence is chosen. It exists a firing sequence where t2 is L0-live, but not in every firing sequence.
5) No deadlocks, the petri net is infinite if t4 and t3 are chosen in every firing sequence or it stops after t2. So there are no deadlocks.
6) Our petri net is not a workflow net, because it exists only as an Input place but no Output place.

Exercise 3


call head of department
Input_place
do stuff
ask colleagues
gathering equipment
receive equipment and samples
start experiment
insert information
system setup finished
usage computer
leave computer
finished phase 1
start phase 2
do the experiment
successfull or failure
success
failure
prepare for re iteration
start phase 3
julia want the computer
working on computer
finished work
leave computer
julia wants the computer
works on the computer
finished work
leave computer
usage computer
grags the computer
insert experimental results
leave computer
return equipment
writes report
report finished
submit report
Output_place