# A Goal Programming Model for The Scheduling Problem of Security Guards at Condominium in Kota Kinabalu


## ABSTRACT

The construction of a goal programming model to schedule security guards at the condominium in Kota Kinabalu, Sabah, is discussed in this article. The data used is based on the manual schedule and the schedule will be built over a period of four weeks. Eight securities work in total across two shifts, the morning shift, and the night shift. The model's construction is based on security responsibilities to the condominium, which are hard constraints, while staff needs are soft constraints. The preemptive method is used in this study because it establishes% the goals in order of priority and optimizes one by one starting the goal with the highest priority, followed by the second priority goal and the lowest priority goal. The model will then be applied in LINGO version 18.0 to generate an ideal schedule. From the schedule, all the goals and constraints have been achieved completely.