BASIC ASSIGNMENT 4 CORE METHODS IN EDUCATIONAL DATA MINING PROFESSOR RYAN S. BAKER

DUE VIA ASSISTMENTS NOVEMBER 2, 2020, 5PM, EASTERN STANDARD TIME

You are allowed to answer this assignment using either **RapidMiner** or **Python**.

If you choose to answer the assignment using **RapidMiner**, your goal is to find sequential patterns of interest using the RapidMiner data set. We recommend you use RapidMiner 7 or higher to complete this assignment, as other packages will be likely to produce slightly different results.

This data set has the following variables:

- anonid which student it is
- obsnum how many observations have been conducted for this student
- behavior-ontask in this observation, the student was coded as on task (solitary)
- behavior-ontaskconv -- in this observation, the student was coded as on task (conversation)
- behavior-offtask-- in this observation, the student was coded as off task
- affect-frustrated in this observation, the student was coded as frustrated
- affect-concentrating in this observation, the student was coded as being in engaged concentration
- affect-confused -- in this observation, the student was coded as being confused
- affect-bored -- in this observation, the student was coded as being bored

This data set was previously published in

Baker, R.S.J.d., Moore, G., Wagner, A., Kalka, J., Karabinos, M., Ashe, C., Yaron, D. (2011) <u>The Dynamics</u> <u>Between Student Affect and Behavior Occurring Outside of Educational Software.</u> Proceedings of the 4th bi-annual International Conference on Affective Computing and Intelligent Interaction.

If you choose to answer the assignment using **Python**, your goal is to find association rules of interest in the Python data set.

This data set was previously published in

Almeda, M. V., Scupelli, P., Baker, R. S., Weber, M., & Fisher, A. (2014, March). <u>Clustering of design</u> <u>decisions in classroom visual displays.</u> In Proceedings of the Fourth International Conference on Learning Analytics And Knowledge (pp. 44-48). ACM.

Final note: If ASSISTments displays check marks and X's on the left panel of the assignment, or a performance bar on the bottom, don't wory. It is OK to ask for hints and make errors. If you complete the assignment, you will receive full credit.