**Abstract -** Educational data mining is a growing academic research area which aims to gain significant insights on student behavior, interactions
and performance by applying data mining methods on educational data. During the last decades, a variety of accurate models has been
developed to monitor students' future progress, while most of these
studies are based on supervised classification methods. In this
work, we propose an ensemble semi-supervised algorithm for the
prediction of students' performance in the final examinations at the
end of academic year.
The experimental results demonstrate the efficiency and robustness
of the proposed algorithm compared to some classical classification
algorithms, in terms of accuracy.