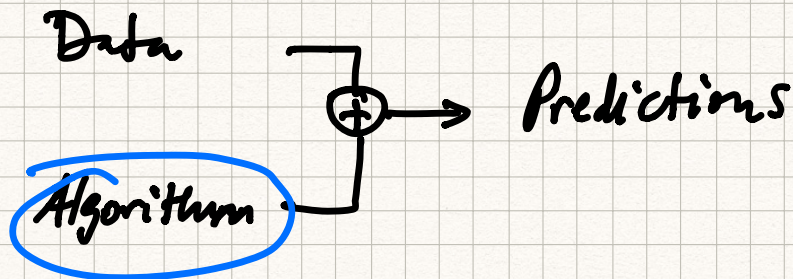


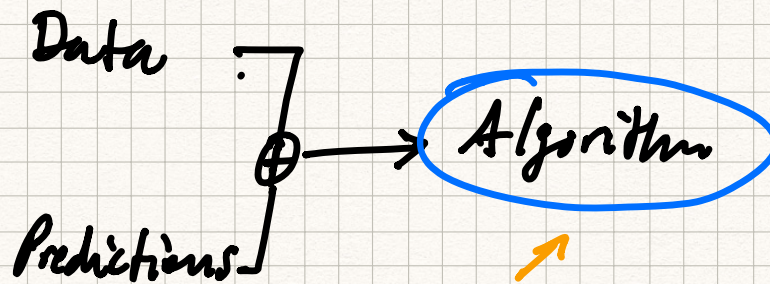
How To MAKE PREDICTIONS

TRADITIONAL COMPUTER PROGRAM



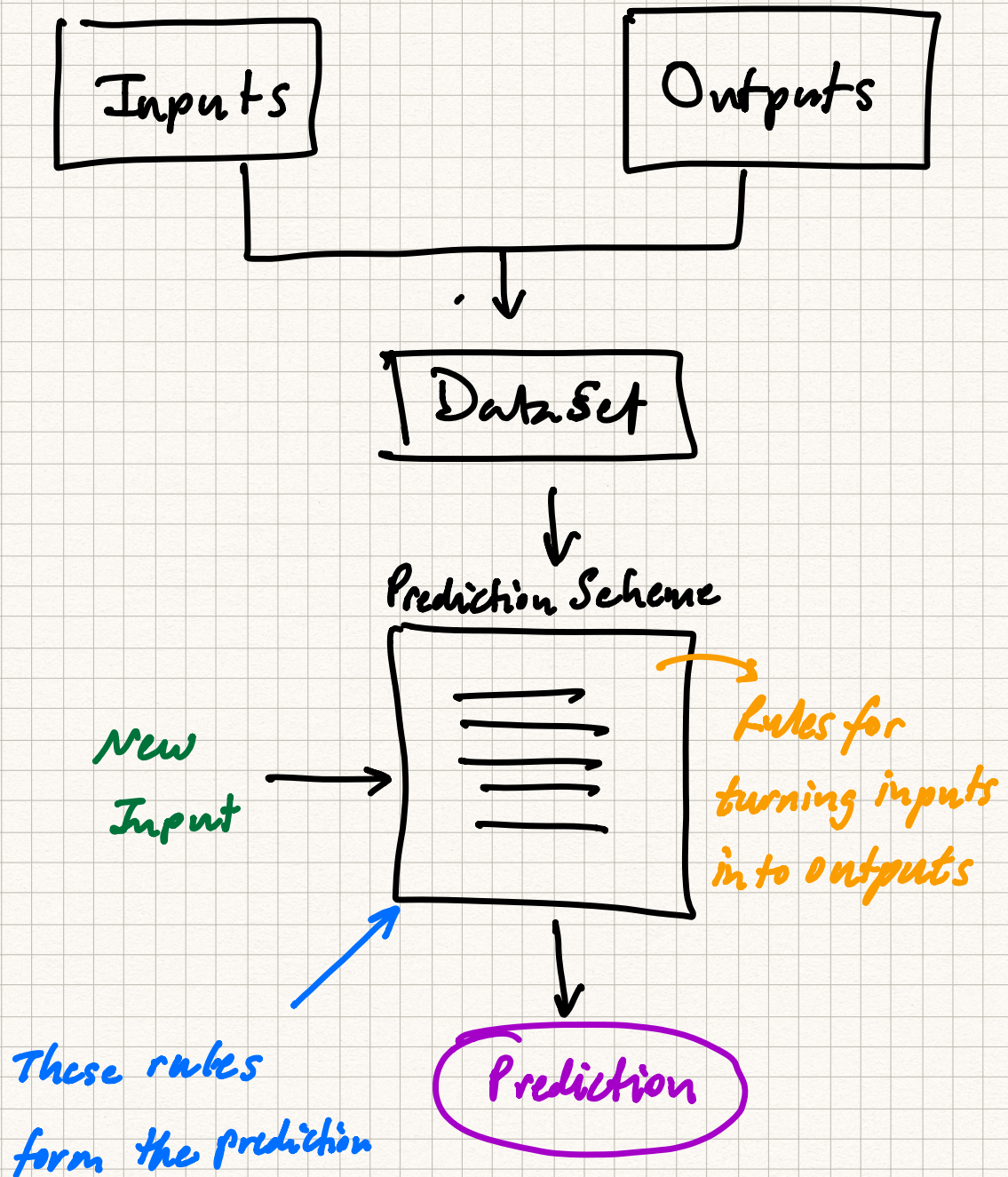
↑
Here the algorithm is an input
to the process

THE MACHINE LEARNING COMPUTER PROGRAM



↑
Here the algorithm is
an output of the
process

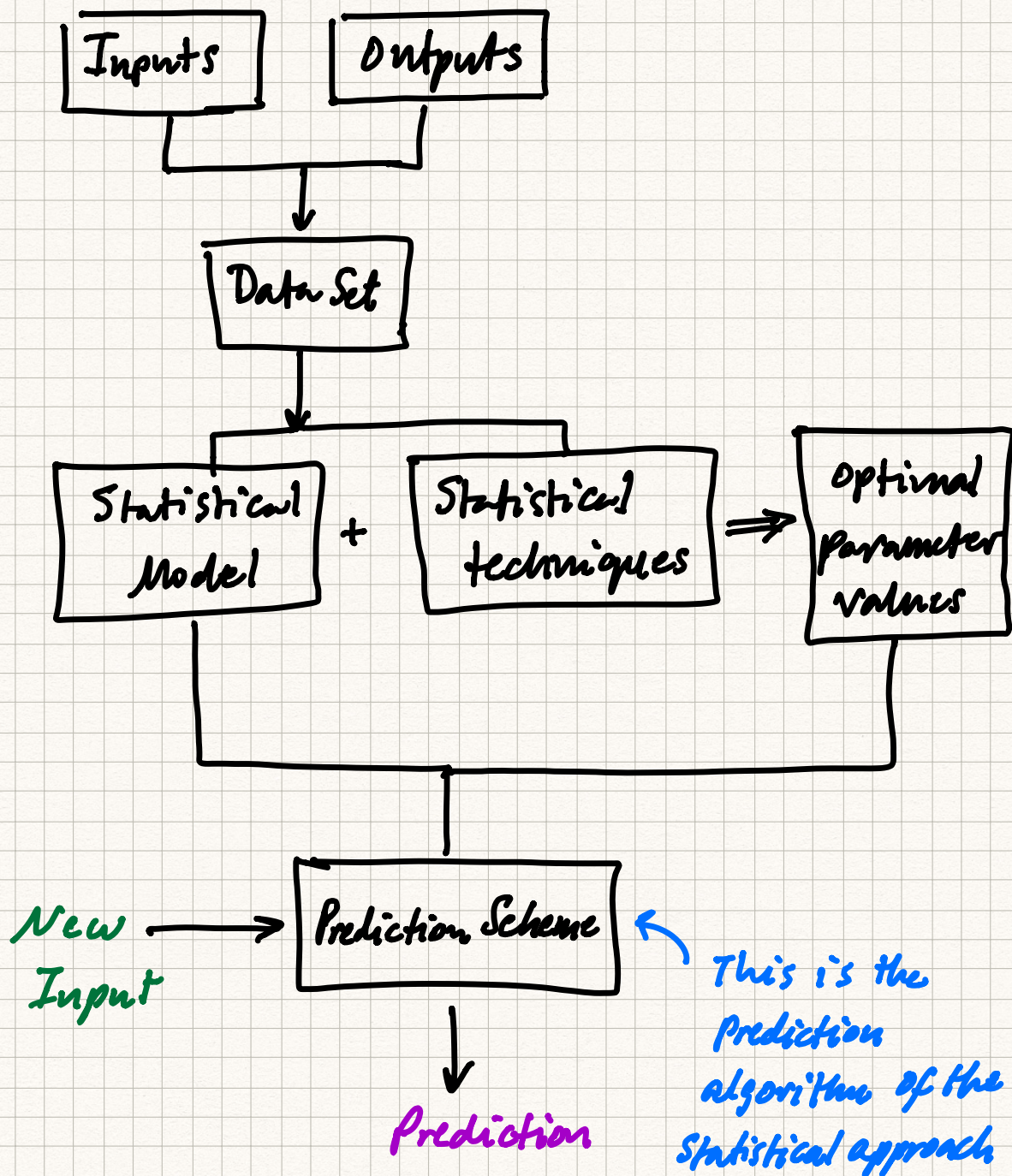
THE RULE-BASED APPROACH TO PREDICTION



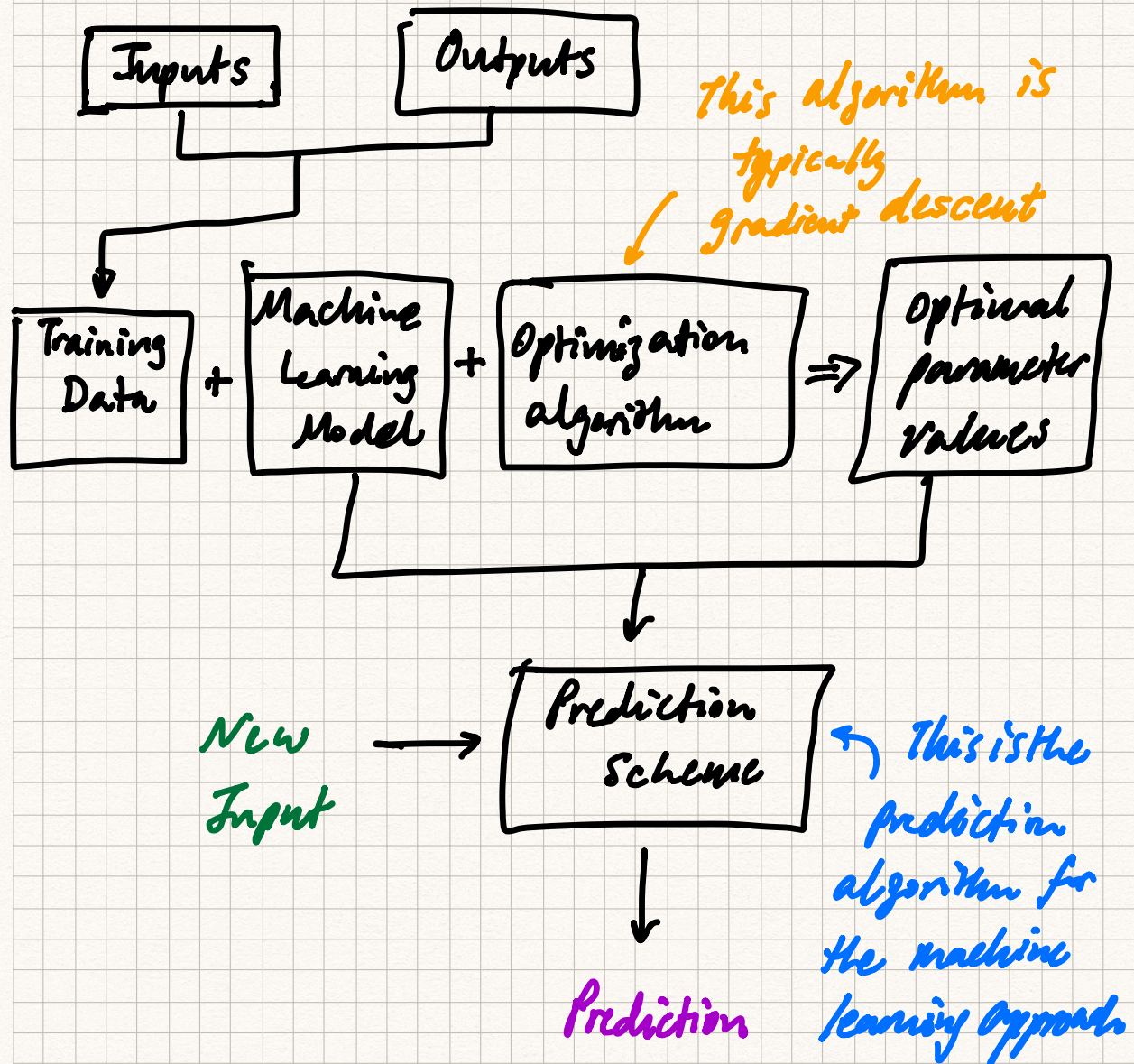
These rules
form the prediction

algorithm of the rules-based approach

THE STATISTICAL APPROACH



THE MACHINE LEARNING APPROACH TO PREDICTION



COMPARING THE APPROACHES TO PREDICTION

	Rules Based	Statistical	Machine Learning
Algorithm for finding the model's optimal parameter values	N/A	Recipes & Creativity	Gradient Descent (Typical)
Does the algorithm for finding the model's parameters need to be programmed by humans?	N/A	yes	yes
Does the prediction scheme need to be explicitly written down?	yes	No	No
Handle data sets w/ large # of attributes?	yes, but difficult	No	yes
Handle datasets w/ large # of rows?	yes, but difficult	yes	yes