The following circuit shown below is a “bare bones” RS flip-flop which has a truth table that contradicts the categorical statement your teacher made in class some days ago: “YOU ALWAYS NEED TO KNOW IN ADVANCE the output ("state") $Q_n, \bar{Q}_n$ to generate the correct and unique TRUTH TABLE for an RS flip-flop.”

Show by developing the truth table for this “unusual” RS flip-flop that your teacher was wrong in making the statement above. That is, show that for some particular inputs $R, S$ you DO NOT need initial values of the outputs.