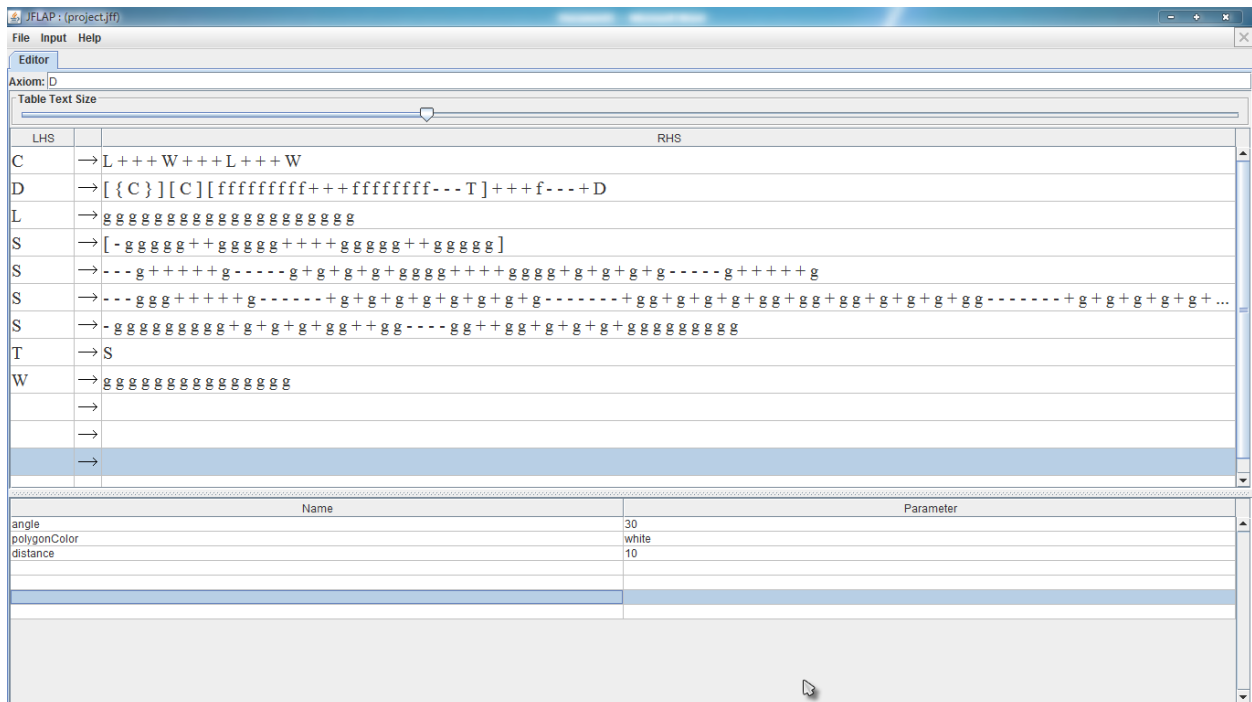
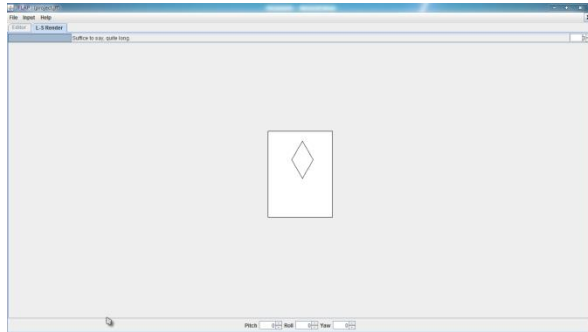


**Figure 1** *Deck of cards*

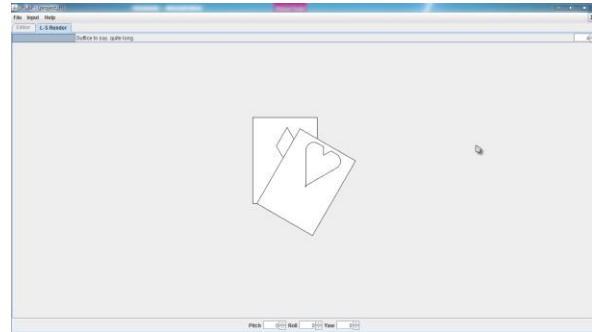
The L-System draws a deck of cards lined in a circular motion. The grammar is shown below:



The grammar consists of seven (6) variables (D, C, L, S, T and W), each of which draws its own content in the L-System. The axiom is D (deck) which consists of a rectangle filled polygon C (card), another polygon C (which serves as the border for the previous rectangle polygon) and a T which randomizes an S (shape) that will be drawn inside the polygon. S (shape) may be in the form of a Diamond (first S in the Grammar), a Spade (second S in the Grammar), a Club (third S in the Grammar) or a Heart (last S in the Grammar). The main purpose of T is to delay the painting of the shapes in order for the card and shape to be drawn at the same time.

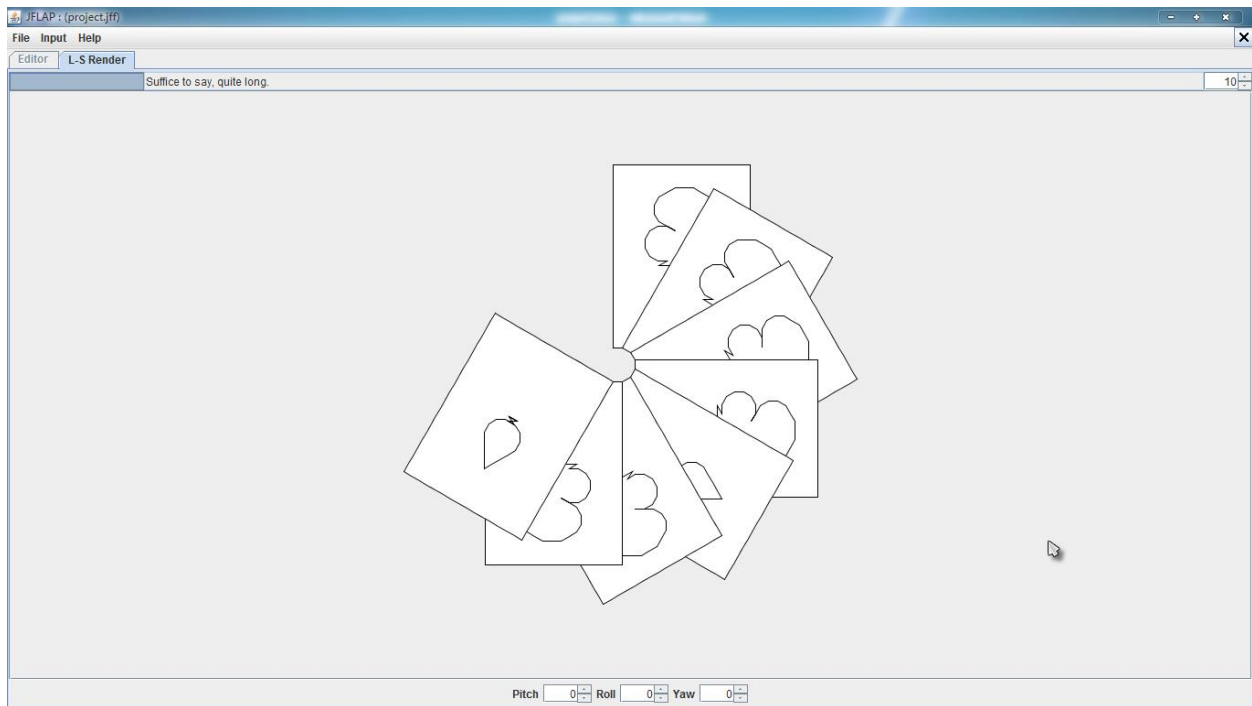


(3<sup>rd</sup> iteration)



(4<sup>th</sup> iteration)

L and W serves as the length and width of the cards. After all of the components of the card are drawn, D will move the turtle 10 distance units to the right, turn it 30 degrees clockwise and call itself.



(10<sup>th</sup> iteration)

After the 14<sup>th</sup> iteration, new cards will cover the previous cards and can proceed recursively (See Figure 1).