

Programming Assignment 1

ESO207

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(a) The recurrence relations for $U(n)$ and $D(n)$. Given $U(1) = 1; D(1) = 0$.

$$U(n) = 3*U(n-1) + D(n-1).$$

$$D(n) = 3*D(n-1) + U(n-1).$$

(e) The graph (Input (n) vs. Time required (micro-seconds)) for each of the three methods are as follows:



