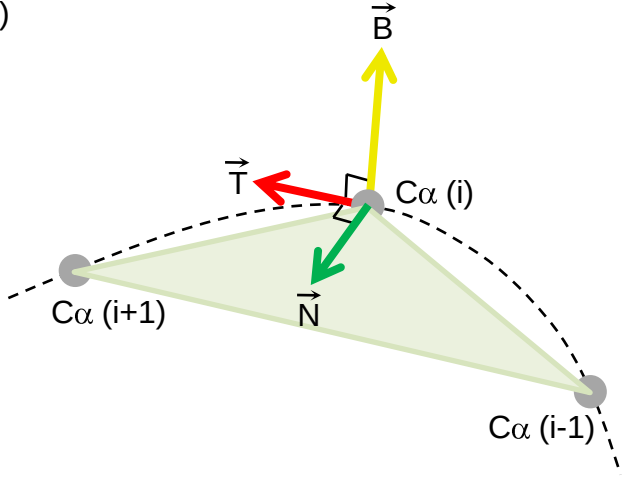
(A)




(B) Local Coordinate Frame

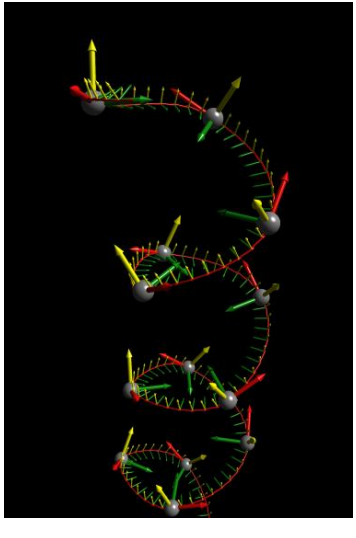
$$M_i = [\ \vec{N}\ \ \vec{B}\ \ \vec{T}\ ] = \begin{bmatrix} N_x & B_x & T_x \\ N_y & B_y & T_y \\ N_z & B_z & T_z \end{bmatrix}$$

(C) Hermite Cubic Polynomial

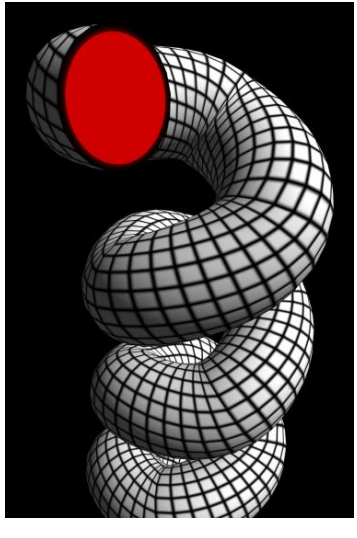
$$x(t) = A_x t^3 + B_x t^2 + C_x t + D_x$$
$$y(t) = A_y t^3 + B_y t^2 + C_y t + D_y$$
$$z(t) = A_z t^3 + B_z t^2 + C_z t + D_z$$
$$0.0 <= t <= 1.0$$

(D) $\text{slerp}(q_1, q_2; t) = q_1 \sin((1-t)\theta) / \sin(\theta) + q_2 \sin(t\theta) / \sin(\theta)$, where $\theta = \cos^{-1}(q_1 \cdot q_2)$

(E)



(F)



(G)