Drawing parametric polynomial curves

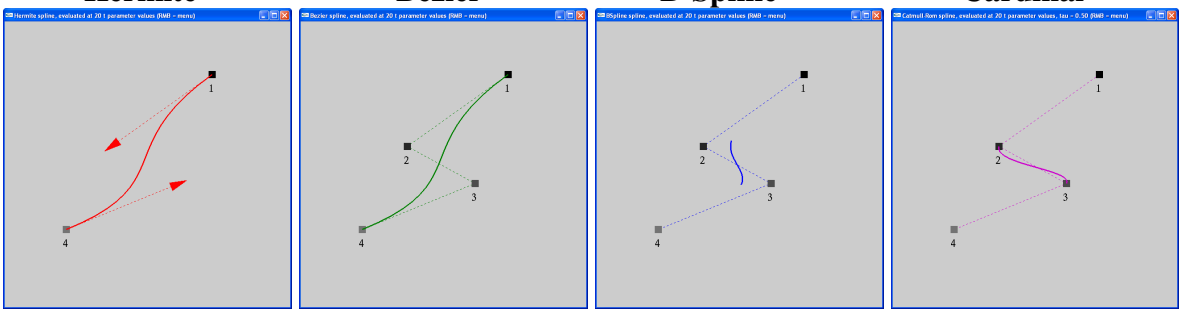
Complete the given source code that draws various parametric *cubic* polynomial curves.

The coordinates of the 4 control points are given: P_1, P_2, P_3, P_4.

The program should draw Hermite, Bezier, B-Spline and Cardinal splines:

$$Q(t) = \sum_{i=1}^{4} B_i(t) P_i \, .$$

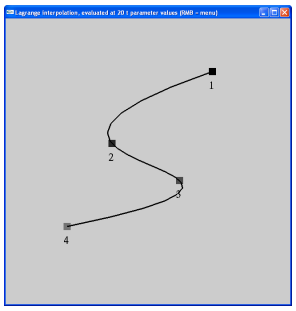
Hermite **Bezier** **B-Spline** **Cardinal**



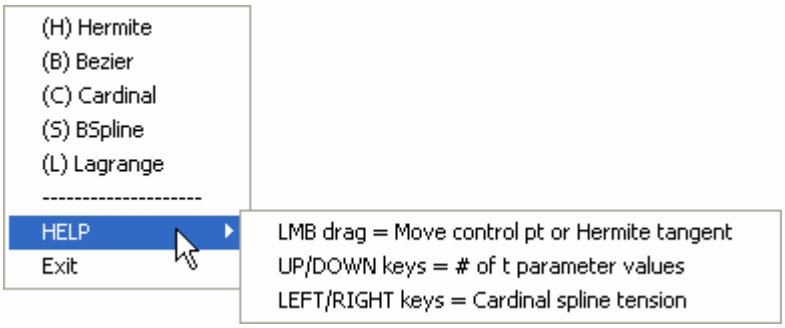
It should also use Lagrange polynomials to interpolate the control points:

$$Q(t) = P_0 L_0^n(t) + P_1 L_1^n(t) + \cdots + P_n L_n^n(t)$$

Lagrange



The menu structure is as shown:



You should only have to add code to **`splines.cpp`** and **`Lagrange.cpp`**.