Write a computer program that determine which of the following models is best (least error), by useing least squares method.

1) $\mathrm{R} = \mathrm{a} + \mathrm{b}.\mathrm{Cos}\left(\frac{2\pi}{24}\mathrm{T}\right) + \mathrm{c}.\mathrm{Sin}\left(\frac{2\pi}{24}\mathrm{T}\right)$
2) $\mathrm{R} = aT^3 + bT^2 + cT + d$

Test your program with the following example then plot result and given knots in a figure

Example: The pH in a reactor varies over the course of a day.

Time, hours	0	2	4	5	7	9	12	15	20	22	24
pH	7.6	7.2	7	6.5	7.5	7.2	8.9	9.1	8.9	7.9	7