$m := 1$

$Tper := 0.1, 0.2 .. 4$

$$Tper = \begin{bmatrix} 0.1 \\ 0.2 \\ 0.3 \\ 0.4 \\ 0.5 \\ 0.6 \\ 0.7 \\ 0.8 \\ 0.9 \\ 1.0 \\ 1.1 \\ 1.2 \\ 1.3 \\ 1.4 \\ 1.5 \\ 1.6 \\ 1.7 \\ 1.8 \\ 1.9 \\ 2.0 \\ 2.1 \\ 2.2 \\ 2.3 \\ 2.4 \\ 2.5 \\ 2.6 \\ 2.7 \\ 2.8 \\ 2.9 \\ 3.0 \\ 3.1 \\ 3.2 \\ 3.3 \\ 3.4 \\ 3.5 \\ 3.6 \\ 3.7 \\ 3.8 \\ 3.9 \\ 4.0 \end{bmatrix} \qquad Tper = \frac{2 \cdot \pi}{\sqrt{\frac{k}{m}}} \xrightarrow{\substack{solve, k \\ float, 8}} \begin{bmatrix} 3947.8418 \\ 986.96044 \\ 438.64908 \\ 246.74011 \\ 157.91367 \\ 109.66227 \\ 80.568199 \\ 61.685028 \\ 48.738787 \\ 39.478418 \\ 32.626791 \\ 27.415568 \\ 23.36001 \\ 20.14205 \\ 17.545963 \\ 15.421257 \\ 13.660352 \\ 12.184697 \\ 10.93585 \\ 9.8696044 \\ 8.9520221 \\ 8.1566979 \\ 7.4628389 \\ 6.8538919 \\ 6.3165468 \\ 5.8400026 \\ 5.4154208 \\ 5.0355124 \\ 4.6942233 \\ 4.3864908 \\ 4.1080559 \\ 3.8553142 \\ 3.625199 \\ 3.415088 \\ 3.222728 \\ 3.0461742 \\ 2.8837412 \\ 2.7339624 \\ 2.5955567 \\ 2.4674011 \end{bmatrix}$$