> # $h^h + h^h + .. + h^h = prime$ **by** $H \cdot E$ '$20 - 8 - 31$:

> $c := 0 : hp := 0 :$ **for** h **from** 1 **to** 10 **do** $hp := hp + h^h$:**if** $isprime(h)$ **then** $print\left(\sum_{i=1}^{h} [i]^i\right.$

$= (evalf(hp)) \, prime[H \cdot E](No\{h\})\left.\right)$ **fi:od**:

$$[1] + [2]^2 = 5. \; prime_{H \cdot E}(No \; \{2\})$$

$$[1] + [2]^2 + [3]^3 = 32. \; prime_{H \cdot E}(No \; \{3\})$$

$$[1] + [2]^2 + [3]^3 + [4]^4 + [5]^5 = 3413. \; prime_{H \cdot E}(No \; \{5\})$$

$$[1] + [2]^2 + [3]^3 + [4]^4 + [5]^5 + [6]^6 + [7]^7 = 873612. \; prime_{H \cdot E}(No \; \{7\}) \qquad \textbf{(1)}$$

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