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> #  $\frac{p^n - 1}{p - 1} = \text{Prime}$  by  $H \cdot E$  :
> with(StringTools) : print(蛭子井博孝, FormatTime("%Y-%m-%d-(%r)")) :for h from 2
to 100 do c := 0 : print( ) :for n from 1 to 10000 do if c = 10 then break elif c < 10
and isprime( $\left(\frac{h^n - 1}{h - 1}\right)$ ) then c := c + 1 : pm || c := GeneMeruPri(H
• E[c]) {  $\left(\frac{[h]^n - 1}{[h] - 1}\right)$  } : print(pm || c) fi:od:if c = 0 then print( $\left(\frac{[h]^N - 1}{[h] - 1}\right)$  is NOT prime
in[N = 10000]) fi:od: print(蛭子井博孝, FormatTime("%Y-%m-%d-(%r)")) :
蛭子井博孝, "2020-02-10-(05:25:57 PM)"

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$$\text{GeneMeruPri}(H \cdot E_1) \left\{ \frac{[2]^2 - 1}{[2] - 1} \right\}$$

$$\text{GeneMeruPri}(H \cdot E_2) \left\{ \frac{[2]^3 - 1}{[2] - 1} \right\}$$

$$\text{GeneMeruPri}(H \cdot E_3) \left\{ \frac{[2]^5 - 1}{[2] - 1} \right\}$$

$$\text{GeneMeruPri}(H \cdot E_4) \left\{ \frac{[2]^7 - 1}{[2] - 1} \right\}$$

$$\text{GeneMeruPri}(H \cdot E_5) \left\{ \frac{[2]^{13} - 1}{[2] - 1} \right\}$$

$$\text{GeneMeruPri}(H \cdot E_6) \left\{ \frac{[2]^{17} - 1}{[2] - 1} \right\}$$

$$\text{GeneMeruPri}(H \cdot E_7) \left\{ \frac{[2]^{19} - 1}{[2] - 1} \right\}$$

$$\text{GeneMeruPri}(H \cdot E_8) \left\{ \frac{[2]^{31} - 1}{[2] - 1} \right\}$$

$$\text{GeneMeruPri}(H \cdot E_9) \left\{ \frac{[2]^{61} - 1}{[2] - 1} \right\}$$

$$\text{GeneMeruPri}(H \cdot E_{10}) \left\{ \frac{[2]^{89} - 1}{[2] - 1} \right\}$$

$$\text{GeneMeruPri}(H \cdot E_1) \left\{ \frac{[3]^3 - 1}{[3] - 1} \right\}$$

$$\text{GeneMeruPri}(H \cdot E_2) \left\{ \frac{[3]^7 - 1}{[3] - 1} \right\}$$

$$\text{GeneMeruPri}(H \cdot E_3) \left\{ \frac{[3]^{13} - 1}{[3] - 1} \right\}$$

$$\text{GeneMeruPri}(H \cdot E_4) \left\{ \frac{[3]^{71} - 1}{[3] - 1} \right\}$$

$$\text{GeneMeruPri}(H \cdot E_5) \left\{ \frac{[3]^{103} - 1}{[3] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_6) \left\{ \frac{[3]^{541} - 1}{[3] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_7) \left\{ \frac{[3]^{1091} - 1}{[3] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_8) \left\{ \frac{[3]^{1367} - 1}{[3] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_9) \left\{ \frac{[3]^{1627} - 1}{[3] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_{10}) \left\{ \frac{[3]^{4177} - 1}{[3] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_1) \left\{ \frac{[4]^2 - 1}{[4] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_1) \left\{ \frac{[5]^3 - 1}{[5] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_2) \left\{ \frac{[5]^7 - 1}{[5] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_3) \left\{ \frac{[5]^{11} - 1}{[5] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_4) \left\{ \frac{[5]^{13} - 1}{[5] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_5) \left\{ \frac{[5]^{47} - 1}{[5] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_6) \left\{ \frac{[5]^{127} - 1}{[5] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_7) \left\{ \frac{[5]^{149} - 1}{[5] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_8) \left\{ \frac{[5]^{181} - 1}{[5] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_9) \left\{ \frac{[5]^{619} - 1}{[5] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_{10}) \left\{ \frac{[5]^{929} - 1}{[5] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_1) \left\{ \frac{[6]^2 - 1}{[6] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_2) \left\{ \frac{[6]^3 - 1}{[6] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_3) \left\{ \frac{[6]^7 - 1}{[6] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_4) \left\{ \frac{[6]^{29} - 1}{[6] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_5) \left\{ \frac{[6]^{71} - 1}{[6] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_6) \left\{ \frac{[6]^{127} - 1}{[6] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_7) \left\{ \frac{[6]^{271} - 1}{[6] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_8) \left\{ \frac{[6]^{509} - 1}{[6] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_9) \left\{ \frac{[6]^{1049} - 1}{[6] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_{10}) \left\{ \frac{[6]^{6389} - 1}{[6] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_1) \left\{ \frac{[7]^5 - 1}{[7] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_2) \left\{ \frac{[7]^{13} - 1}{[7] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_3) \left\{ \frac{[7]^{131} - 1}{[7] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_4) \left\{ \frac{[7]^{149} - 1}{[7] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_5) \left\{ \frac{[7]^{1699} - 1}{[7] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_1) \left\{ \frac{[8]^3 - 1}{[8] - 1} \right\}$$

$$\frac{([9]^N - 1)}{[9] - 1} \text{ is NOT prime} \in [N = 10000]$$

$$GeneMeruPri(H \cdot E_1) \left\{ \frac{[10]^2 - 1}{[10] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_2) \left\{ \frac{[10]^{19} - 1}{[10] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_3) \left\{ \frac{[10]^{23} - 1}{[10] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_4) \left\{ \frac{[10]^{317} - 1}{[10] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_5) \left\{ \frac{[10]^{1031} - 1}{[10] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_1) \left\{ \frac{[11]^{17} - 1}{[11] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_2) \left\{ \frac{[11]^{19} - 1}{[11] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_3) \left\{ \frac{[11]^{73} - 1}{[11] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_4) \left\{ \frac{[11]^{139} - 1}{[11] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_5) \left\{ \frac{[11]^{907} - 1}{[11] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_6) \left\{ \frac{[11]^{1907} - 1}{[11] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_7) \left\{ \frac{[11]^{2029} - 1}{[11] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_8) \left\{ \frac{[11]^{4801} - 1}{[11] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_9) \left\{ \frac{[11]^{5153} - 1}{[11] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_1) \left\{ \frac{[12]^2 - 1}{[12] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_2) \left\{ \frac{[12]^3 - 1}{[12] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_3) \left\{ \frac{[12]^5 - 1}{[12] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_4) \left\{ \frac{[12]^{19} - 1}{[12] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_5) \left\{ \frac{[12]^{97} - 1}{[12] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_6) \left\{ \frac{[12]^{109} - 1}{[12] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_7) \left\{ \frac{[12]^{317} - 1}{[12] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_8) \left\{ \frac{[12]^{353} - 1}{[12] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_9) \left\{ \frac{[12]^{701} - 1}{[12] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_{10}) \left\{ \frac{[12]^{9739} - 1}{[12] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_1) \left\{ \frac{[13]^5 - 1}{[13] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_2) \left\{ \frac{[13]^7 - 1}{[13] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_3) \left\{ \frac{[13]^{137} - 1}{[13] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_4) \left\{ \frac{[13]^{283} - 1}{[13] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_5) \left\{ \frac{[13]^{883} - 1}{[13] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_6) \left\{ \frac{[13]^{991} - 1}{[13] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_7) \left\{ \frac{[13]^{1021} - 1}{[13] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_8) \left\{ \frac{[13]^{1193} - 1}{[13] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_9) \left\{ \frac{[13]^{3671} - 1}{[13] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_1) \left\{ \frac{[14]^3 - 1}{[14] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_2) \left\{ \frac{[14]^7 - 1}{[14] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_3) \left\{ \frac{[14]^{19} - 1}{[14] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_4) \left\{ \frac{[14]^{31} - 1}{[14] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_5) \left\{ \frac{[14]^{41} - 1}{[14] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_6) \left\{ \frac{[14]^{2687} - 1}{[14] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_1) \left\{ \frac{[15]^3 - 1}{[15] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_2) \left\{ \frac{[15]^{43} - 1}{[15] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_3) \left\{ \frac{[15]^{73} - 1}{[15] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_4) \left\{ \frac{[15]^{487} - 1}{[15] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_5) \left\{ \frac{[15]^{2579} - 1}{[15] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_6) \left\{ \frac{[15]^{8741} - 1}{[15] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_1) \left\{ \frac{[16]^2 - 1}{[16] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_1) \left\{ \frac{[17]^3 - 1}{[17] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_2) \left\{ \frac{[17]^5 - 1}{[17] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_3) \left\{ \frac{[17]^7 - 1}{[17] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_4) \left\{ \frac{[17]^{11} - 1}{[17] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_5) \left\{ \frac{[17]^{47} - 1}{[17] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_6) \left\{ \frac{[17]^{71} - 1}{[17] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_7) \left\{ \frac{[17]^{419} - 1}{[17] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_8) \left\{ \frac{[17]^{4799} - 1}{[17] - 1} \right\}$$

$$GeneMeruPri(H \cdot E_1) \left\{ \frac{[18]^2 - 1}{[18] - 1} \right\}$$

蛭子井博孝, "2020-02-11-(12:47:19 AM)"

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