

$$(\cdot^0) \Rightarrow \text{merge} (\text{map} (2*) (\cdot^7)) (3: \underbrace{\text{map} (3*) (\cdot^6)}_{(\cdot^{15})})$$

(\cdot^7) is hamming from the 2nd element onwards $\therefore 2: \dots$

$$(\cdot^{10}) \text{ cont.} \Rightarrow \text{merge} (\underbrace{\text{map} (2*) 2: (\cdot^{12})}_{(\cdot^{13})}) (3: \text{map} (3*) (\cdot^6))$$

$$(\cdot^{13}) \Rightarrow \text{map} (2*) 2: (\cdot^{12}) \Rightarrow^{25} (2*2): \text{map} (2*) (\cdot^{12})$$

$$\Rightarrow^{26} 4: \underbrace{\text{map} (2*) (\cdot^{12})}_{(\cdot^{14})}$$

$$(\cdot^{10}) \text{ cont.} \Rightarrow \text{merge} (4: (\cdot^{14})) (3: (\cdot^{15}))$$

$$\Rightarrow^{27} 3: \underbrace{\text{merge} (4: (\cdot^{14})) (\cdot^{15})}_{(\cdot^{16})}$$

$$(\cdot^{14}) \text{ cont.} \Rightarrow \text{merge} (5: \underbrace{\text{map} (5*) (\cdot^9)}_{(\cdot^{16})}) (3: (\cdot^{16}))$$

$$\Rightarrow^{28} 3: \underbrace{\text{merge} (5: \text{map} (5*) (\cdot^9)) (\cdot^{16})}_{(\cdot^{17})}$$

$$(\cdot^{16}) \Rightarrow \text{merge} (4: (\cdot^{14})) (\cdot^{15})$$

$$(\cdot^{15}) \Rightarrow \text{map} (3*) (\cdot^6) \Rightarrow^{30} \text{map} (3*) 2: (\cdot^{16})$$

$$\Rightarrow^{31} (3*2): \text{map} (3*) (\cdot^{18}) \Rightarrow^{32} 6: \underbrace{\text{map} (3*) (\cdot^{18})}_{(\cdot^{19})}$$

$$(\cdot^{16}) \text{ cont.} \text{ merge} (4: (\cdot^{14})) (6: (\cdot^{19}))$$

$$\Rightarrow^{33} 4: \underbrace{\text{merge} (\cdot^{14}) (6: (\cdot^{19}))}_{(\cdot^{20})}$$

$$(\cdot^{17}) \text{ cont.} \text{ merge} (5: \text{map} (5*) (\cdot^9)) (4: (\cdot^{20}))$$

$$\Rightarrow^{34} 4: \text{merge} (5: \text{map} (5*) (\cdot^9)) (\cdot^{20})$$