

$$\text{Ack}(x, y) \xrightarrow{\text{func}} \text{Ack}(y, \text{Ack}(x, 1)) \quad (2)$$

$$\hookrightarrow \text{Ack}(1, \text{Ack}(x, 0))$$

$$\hookrightarrow \text{Ack}(x, 1)$$

$$\hookrightarrow \text{Ack}(1, \text{Ack}(x, 0))$$

$$\text{Ack}(x, 0) \xrightarrow{\text{func}} \text{Ack}(1, 1)$$

$$\hookrightarrow \text{Ack}(0, \text{Ack}(1, 0))$$

$$\hookrightarrow \text{Ack}(0, 1)$$

$$\hookrightarrow 1+1=x$$

$$(0+1)=0$$

$$\text{Ack}(1, x) \xrightarrow{\text{func}} \text{Ack}(0, \text{Ack}(1, x))$$

$$\hookrightarrow \text{Ack}(0, \text{Ack}(1, 1)) \rightarrow \text{Ack}(0, x) = x$$

$$\text{Ack}(x, 1) = 0 = \text{Ack}(x, 0)$$

$$\text{Ack}(x, 1) = \text{Ack}(x, 0) \quad **$$

$$\hookrightarrow \text{Ack}(1, 0) \quad **$$

$$** \text{Ack}(x, 0) \xrightarrow{\text{func}} \text{Ack}(1, \text{Ack}(x, 1))$$

$$\hookrightarrow \text{Ack}(1, 0) \quad **$$

$$\hookrightarrow \text{Ack}(1, \text{Ack}(x, 1))$$

$$\hookrightarrow \text{Ack}(1, \text{Ack}(x, 1))$$

$$** \text{Ack}(1, 0)$$

$$\hookrightarrow \text{Ack}(0, \text{Ack}(1, 1))$$

$$\hookrightarrow \text{Ack}(0, \text{Ack}(1, 0))$$

$$\hookrightarrow \text{Ack}(0, \text{Ack}(1, 1))$$

$$\text{Ack}(0, 1) = 1$$

$$\hookrightarrow \text{Ack}(0, \text{Ack}(1, 1))$$

$$\text{Ack}(0, 0) = 0$$

$$\text{Ack}(0, 1) = 1$$

$$\text{Ack}(0, 1) = 1$$

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$$* \leftarrow \text{ACK}(1, 9)$$

$$\hookrightarrow \text{ACK}(0, \text{ACK}(1, 9))$$

$$\hookrightarrow \text{ACK}(0, \underbrace{\text{ACK}(1, 9)}_9)$$

$$\underbrace{\hspace{10em}}_{\text{ACK}(0, 9) = 10}$$

$$\text{ACK}(0, 10) = 11 \quad \longrightarrow \quad \text{ACK}(r, w) = \text{ACK}(1, 11)$$

$$\text{ACK}(1, 11) \longrightarrow \text{ACK}(0, \text{ACK}(1, 11))$$

$$\hookrightarrow \text{ACK}(0, \underbrace{\text{ACK}(1, 11)}_{11})$$

$$\underbrace{\hspace{10em}}_{12}$$

$$\Rightarrow \text{ACK}(1, 11) = 12 = \text{ACK}(r, w)$$

$$= \text{ACK}(r, 11)$$

$$\Rightarrow \text{ACK}(r, 11)$$

$$= \text{ACK}(r, 12)$$

(لے کر دم خطہ کا پی سی ۲۹ کی جی پی سی ۱۲، ۱۱، ۱۰، ۹، ۸، ۷، ۶، ۵، ۴، ۳، ۲، ۱، ۰)