$i\ddot{e} \ \ddot{t}\ddot{e}^{*} \ \ddot{l}_{1}^{\circ} \ddot{l}_{1}, \ \ddot{e}^{-1} \ \ddot{l}_{1}^{\circ} \ddot{l}_{1}, \ \ddot{e}^{-1} \ \ddot{$

 $1960 \tilde{\epsilon} ..., \tilde{\epsilon} \tilde{\mathbf{C}} \tilde{\mathbf{C}}$

 $\ddot{e}, \ddot{i}, \dot{i} & -\dot{e} = \ddot{e} & \ddot$

$$\begin{split} & \vdash \hat{i}, \hat{j}\hat{i} \quad \hat{i}\hat{i}\hat{f} \stackrel{\circ}{\circ}\hat{g} \stackrel{\circ}{\circ}, \hat{i} & \vdash \hat{e}^{i}/2\hat{i} \quad \hat{i} \stackrel{\circ}{\circ} \vdash \hat{e}^{i} \stackrel{\circ}{\circ} \quad \hat{i} \stackrel{\bullet}{\circ} \vdash \dots \hat{i}, \quad \hat{i}\hat{Z}^{i}/4\hat{i}^{i}\hat{e} \stackrel{\circ}{\circ} \stackrel{\circ}{\circ} \quad \hat{e}^{i}, \hat{g} \stackrel{\circ}{\circ} \stackrel{\circ}{\circ} \stackrel{\circ}{\circ} \stackrel{\circ}{\circ} \stackrel{\circ}{\circ} \quad \hat{e}^{i}/2\hat{i} \quad \hat{e}^{i} \stackrel{\circ}{\circ} \stackrel{\circ}{\circ$$

 $\label{eq:controller} \begin{align*} $i \S \in \Bbb R^* \to \Bbb R^*$

- ë, "ì, j è부가 통ì¼ì, ìœ,,í•´ "i™, ì,,,ì— ì `ì; ′í•~ëŠ" ì,±í-¥"ì, ë²,,ë|´ ê²f;
- $i_1 {}^\circ i, \ \ddot{e}^{-1} / \dot{a} \dot{E}^{1} /$

$$\begin{split} &\text{``ITM$} \in \circ^{\text{``TM$}} \in \circ^{\text{``E}} \in \circ^{\text{``ITM$}} \in \circ^{\text{``E}} \in \circ^{\text{``IV}} \circ \circ^{\text{``E}} = \circ^{\text{``IV}} \circ \circ^{\text{``E}} \circ \circ^{\text{``E}}$$

 $\ddot{e}^{-1/4\ddot{e}_{1}}, \ \ \dot{e}^{-1/4\ddot{e}_{1}}, \ \ \dot{e}^{-1/4\ddot{e}_{1}}$

 $\ddot{e},\ddot{i},\dot{i} \cdot \ddot{e} \P \in \tilde{i} \ \ddot{i} \ ... \dot{i} \\ \ddot{z} \\ \ddot{e}^{3} \in \tilde{i} \\ \ddot{f} \\ \ddot{f} \\ \ddot{e}^{2} \in \hat{i} \\ \ddot{e}^{2} \\ \dot{e}^{3} \\$

 $\ddot{e} \| \hat{i}_{1} \| \hat{e}^{3} \|_{4} \ddot{e}, \ddot{i}_{1} \| \hat{e}^{\circ}, \ddot{i}^{-} \| \hat{\mu} \hat{e}^{*} \|^{2} \ddot{i}^{-} \| \hat{i}^{-} \|^{2} \| \hat{e}^{-} \|^{2} \|^{2} \| \hat{e}^{-} \|^{2}$

 $i'\ i\ \varpi^{\bullet}\widehat{\ }-\widehat{\ }-\widehat{\$

 $\begin{array}{l} \ddot{e} < \ddot{\omega}_{1}, & \ddot{e}^{a} \dots \dot{\omega} / \ddot{e}_{1} & \dot{e}^{a} & \dot{e}^{-1}_{1}, & \dot{e}^{-1}_{1}, & \dot{e}^{-1}_{1}, & \dot{e}^{-1}_{2}, & \dot{e}^{1$

 $19 \ i^{\circ\circ}\ddot{e}_{1} \in \tilde{f} \ i^{\circ\circ}\ddot{e}_{1}, \text{is} \in \tilde{e}_{1} \circ \ddot{e}_{2} \circ \ddot{e}_{3} \ddot{e}_{$

 $\ddot{e}^{1}, \hat{e}^{3} \mu \hat{e}^{\circ} c \ddot{e}^{1} \dot{e}^{3}, \underline{f}^{\circ} c \ddot{e}^{2} \ddot{e}^{1} \ddot{e}^{2} \dot{e}^{1} \dot{e}^{2} \dot{e}^{1} \ddot{e}^{2} \dot{e}^{2} \dot$

- 1. ì'ì,°ê°€ì¡± ë° ì¹œì§€ë"¤ì` 주소를 ĭ¶"ì 하ê³ ê·¼í™©ì,, 파악핯ì—¬, ì′를 ì′ë"¤ì—게 알ëļ°ë‹¤.
- 2. i'i, °ê° \in i¦± ë° i¹æì§ \in ë" ifī ¸ê°,,i` ižìœ ë;œìš' ë°©ë¬, ë° ižìœ ë;œìš' ìfë'‰ì, i‹¤ì‹œí•œë‹¤.
- $3. \ i'i, °\hat{e}° \in i_j \pm \ddot{e}° \ i^1 @i\S \in \ddot{e}" @i°, i" \ ižiœ \ddot{e}; @is' i—°\ddot{e}'/2i, i < @i < @i < @i < @i < ...)$

[•©\[`e^\] \[`e\] \[`e

 $i_1^\circ i_1, \bar{e}^- i_2 \hat{E}_1 \hat{E}_2 \hat{E}_2 \hat{E}_3 \hat{E}_3 \hat{E}_4 \hat{E}_4 \hat{E}_3 \hat{E}_4 \hat{E}_4 \hat{E}_3 \hat{E}_4 \hat{E}_4 \hat{E}_4 \hat{E}_4 \hat{E}_4 \hat{E}_3 \hat{E}_4 \hat{E}_4$

$$\begin{split} &\tilde{i}\tilde{-}\tilde$$

P'« ë²^ì§, í•©ì` ë, ĭ\$©ì€ 한êµ í†µì¼ k□ſ*,,ì` ê,°ë°~ì' ë 3대 주i\$"'b]¹™ì,, ì•,ëž`와 ê°™i` ì•í•~ê³ ìž`ë⟨□.

- 1. "ìžì£¼ì 으ë;œ, ì™ jì, jĩ ì§€ìì'ë, ~ ì™ ë¶€ĩ ê°œìž... ì—†ì'"
- 2. "ë¬îž¥ ì,,ë ¥ì, ì,¬iš©í•~ì§€ 않ê³ í‰í™"ì ì, 방법윹¼ë;œ"
- 3. "ì, \neg if, i'ìf ë° i² i œi `ifì'í•"i— ê' \in ê³,, i—†ì'."

 $i_{1}^{\circ}i_{1}, \ \bar{e}^{-1/4}i E^{1/4}i E^{1/4}i E^{1/4}i E^{1/4}i^{-2}i \mu^{\text{TM}}"\hat{e}\mu i - i_{1}, \ \bar{e} \ i_{2}^{\circ}i + i_{3}^{\circ}i + i_{4}^{\circ}i + i_{4}^{\circ}i$

ë, "한ì—ì,œëŠ" ê³μë™ì,±ë³...i′ ë°•ì•ί~ĩ "ë...ë ¥" ë° í•œêμĩ "ľ‰ſ™"ì, ižì£¼ì ì, ί†μἰ¼"i, λœ,ί•œ ì•ι±...i′ i′ë¤,ë, , ê²°ê³¼ë¼ê³ ì, ì , èς㳠있ë∢¤.

ê·ŖŸ¬ë,~ë¶,벅한 ì,¬k¤Ѥ,ìœ,;t™€ ê°™Ѥ "bì¹™"ĩ ê²°ì • ë° í•©í 는 물i;±£¼i`ì ì,±ê²©ì′ 강한 ë,¨ë¶ ì•ë¶€ì— ì´í•´ kæí—‰ëœ ì•\±…í` ê²°ê³¼ì
′ë©°, ë,¨ì;ê³¼ ë¶ì;ì′ ê°ê° "ižì£¼ì,±ì` bì¹™"ê³¼ "‰ſ™"ì ë… ì, "l´ë¼ëŠ" ìfī,ê°,,i` ìj°ê± î, ìš©ì,í•°ê³ i´¯ë½í•œ ê²°ê³¼ë¼ëŠ" ì l´ëҳ¤.

$$\begin{split} \mathbf{i}'\ddot{\mathbf{e}}\ddot{\mathbf{Y}} &= \mathbf{i}'\mathbf{e}\ddot{\mathbf{e}}, \neg \mathbf{k} \mathbf{m} \dot{\mathbf{e}} \mathbf{i}, \mathbf{n} \dot{\mathbf{e}}^2 \mathbf{i} \mathbf{i}, \mathbf{n} \dot{\mathbf{e}}^2 \mathbf{i}, \mathbf{n} \dot{\mathbf{e}}^2 \mathbf{i} \mathbf{i}, \mathbf{n} \dot{\mathbf{e}}^2 \mathbf{i} \mathbf{i}, \mathbf{n} \dot{\mathbf{e}}^2 \mathbf{i} \mathbf{i}, \mathbf{n} \dot{\mathbf{e}}^2 \mathbf{i} \mathbf{i}, \mathbf{n} \dot{\mathbf{e}}^2 \mathbf{i}, \mathbf{n} \dot{\mathbf{e}}^2 \mathbf{i} \mathbf{i}, \mathbf{n} \dot{\mathbf{e}}^2 \mathbf{i}, \mathbf$$

i•,,ëž`i— i—'ê±°ëœ i—¬i,¯ê°€i\$€i`ê°œë³,, í•©i`ì,¬í•ì—는 ì–'ì; ê°,,i— í•©i`ëœ ì,¬i•`ë°¤i' í¬í•¨ë°ī—' ìž`다.

- "ì,,œë;œë¥¼ ë¹,,ë°©í•~ê±°ë,~ ê³μ격í•~ì§€ 않는ë<¤."
- "ë¬îž¥ ë,,ë°œí-‰ìœ,,를 ižì œí•œë‹¤."
- $-\text{"!ê°'}i\check{z}`i\check{S}\square\ddot{e}\ddot{Y}^\circ\text{ if } \ \ \check{z}\ i, \neg if\varpi i \ \ \ddot{e}^\circ\varpi i^\circ\varpi i, \ \ddot{e}^\circ\varpi i \ \ \dot{e}^\circ i, \ \dot{e}^\circ\varpi i, \$
- $\ "\hat{e}^3 \mu \ddot{e}^{TM} \hat{l}_{,, \pm} \dot{e}^a \dots \ \ddot{e}^\circ \ \grave{z} \grave{z} \dot{t} \dot{t}^4 \hat{l}_{, 1} \hat{l} \% \hat{l}^{TM} \hat{l}_{, 1} \hat{$
- "ì kìžì,¬ î~ìfĩ ì;°ì†í•~ê³ ì,±ê³μì ì, ì¢...ê²°ì, ì§€bí•~ê³ ĩ~ì;°í•œë<¤."
- "ë¶ì jê³¼ ë, "ì j ê°,j` ë¬ ì œë¥¼ ê·œì œí•~ê,° ìœ,j•œ ìœ,,b 회를 구ì,,±í•œë‹¤."

⊢'ì,¡ 볨ë' ê³μë™ì,±ë³…ì, í†μί•′ ἰ•½ἰ†ί•œ ì,¬ί•ë"¤ì, l'í—‰ί•ˆê,° λœἰζ'í–ˆeŠ"ë°, ë°œí'œ 다ìŒë, ë¶€í,° ἰ£¼ë¡œ ê,°ì` ì ì, 방법ἰœ¼ë¡œ l'í–‰ì—l°©ì¯í–ˆe‹¤.

 $\begin{array}{l} \vdash \ 'i,ji \in \ddot{e}^3 \ '\ddot{e},, \ \ddot{e}^\circ \ \ddot{e}^1 \ '\ddot{e}^7 \ '\ddot{e}^\circ \ \ddot{e}^1 \ '\ddot{e}^\circ \ \ddot{e}^1 \ \ddot{e}^1 \ '\ddot{e}^1 \ '\ddot{e}^1 \ '\ddot{e}^1 \ \ddot{e}^1 \ \ddot{e}^1$

i•~지만 ì-'ì, i •ë¶€ĩ ë, ′ë¶€ì ì, ì •ì¹¯ſ™œë™ì—는 ê³μë™ì,±ë³...ič "bì¹™"i— ìž...ê°i•œ ì •ìk ì, ë°"탕윽로 i•œ k¤ì§ˆì ì, ë³€ſ™"ê°€ ì "Γ€ ê 'ۓ°°ë¬ì§€ 않ê³ ìžˆëκ¤. i´ëŠ" ê· bì¹™ì′ k¤ì œë¡œ ìœ íš″한 ê² fi.ì§€ ì˚êμ¬k¬ì, ê°−게 한ë∢¤.

 $\label{eq:control_co$

ë¶ì,jê³¼ ë,¨ì,j ê°,jìˇ ê´€ê³,jì— ë³€î™"ê°€ ̼ì–′ë,Ťë©ʿ1,œ ì,, ì,,ê³,, 대ï¤'ë"¤ë;œë¶€í,°ë,, ë°¯ì'ì, ì′ëŒì–′ 냰ë∢¤.

 $\label{eq:controller} $$ i,$$ $= i \in i^* = i^*$

 $\vec{e} \cdot \vec{e} \cdot$

 $\hat{\mathbf{e}}^{\circ} \widehat{\mathbf{e}} \widehat{\mathbf{z}} \widehat{\mathbf{z}} \widehat{\mathbf{z}} \widehat{\mathbf{e}}^{\circ} \widehat{\mathbf{e}}^{\circ} \widehat{\mathbf{e}}^{\circ} \widehat{\mathbf{z}}, \quad \hat{\mathbf{e}}^{\circ} \widehat{\mathbf{e}} \widehat{\mathbf{z}}^{\circ} \widehat{\mathbf{e}} \widehat{\mathbf{e}}^{\circ} \widehat{\mathbf{$

ižë³,주ĩ êµê°€ë"¤ĩ ë°~ĩ' ë~한 ìfì′í•~ë∢¤.

 $\ddot{e}^-, \hat{e}_1 \hat{e}_2^1 / \hat{e}_1 \hat{e}_1 \hat{e}_1 \hat{e}_2^1 \hat{e}_2 \hat{e}_3 \hat{e}_3$

 $\hat{e}^3\mu\ddot{e}^{TM}l,\pm\ddot{e}^a...l\ddot{i}^2\hat{e}^{2\circ}l-\ddot{e},~\ddot{e}^{\P}\hat{e}\mu\dot{e}^{-\circ}\tilde{e}^3~,~l_i\dot{e}^{-1}/4l\dot{E}^1/4l\dot{E}^1/4l\dot{E}^1/4l\dot{E}^1/4l\ddot{e}^3\mul^{TM}\ddot{e}^3\mu\tilde{e}^{31}/4~\ddot{e},\ddot{e}^{-1}/4e\ddot{e}^{-1}~\dot{e}^{-1}/4e\ddot{e}^{-1},~\dot{e}^{-1}/4e\ddot{e}$

 $i_1^{\circ i_1}, e^{-1/4} E^{1/4} i_1^{\circ i_2} i_1^{\circ e^{-1/4}} E^{1/4} i_1^{\circ e^{-1/4}} e^{-1/4} e^{-1/$

 $\begin{array}{l} \text{l'ITM} \in \hat{\text{e}}^{\circ \text{TM}} \in \hat{\text{l}}_{1}^{\circ \text{l}}, \ \vec{e}^{-1/4} \hat{\text{l}}_{2}^{1/4} \hat{\text{l'}}_{1}^{1/6}, \ \vec{e}^{-1/4} \hat{\text{e}}^{3} \mu^{\text{TM}}^{\text{TM}} \hat{\text{e}}^{1/6} \hat{\text{l}}_{1}^{1/6}, \ \vec{e}^{-1/6} \hat{\text{l}}_{1}^{1/6}, \ \vec{e}^{$

 $\label{eq:continuity} \begin{align*} \textbf{i} \textbf{v} \in \mathbb{R}^2, \textbf{v} \in \mathbb{R}^2 \\ \textbf{v} \in \mathbb{R}^2, \textbf{v} \in \mathbb{R}^2, \textbf{v} \in \mathbb{R}^2 \\ \textbf{v} \in \mathbb{R}^2, \textbf{v} \in \mathbb{R}^2$

한êμ í†μἰ¼ ë¬,ì œ ë° ë,¨ë¶ ê´€ê³,,ì— ê´€ſ•œ ì¡°ì, 민£¼£¼Tì,민ê³μ™"êμ ë° ë,¨í•œ ì •ë¶€ iž...iž¥ï ë³€ſ™"는 한ë°ë,jř ê¸îż¥ì, ¡™,;Γ™";ſ¯ê³ 한êμ ë¬,ì œë¥¼ ⅓‰ſ™"ì 으로 í•´ê²°ſ¯ê¸° ìœ,,한 ê¸ì •ì ì, b€i§iž,jž,,ì— í‹€ë¦¼ ì—†ë‹□. 한êμì,ë"□ ë¿ ì•,,니ë¼ ì ,, ì,륯 ë⁻ſ•œ ì´ëŸ¬ſ•œ b€i§iž,ì,, ¡™";ſ•ˆē³ iž⁻ë‹□.

ìž'ì,±ìž: Z. Yanakiev

1972ë..., 8ì" 16ì¼, í‰ì-'