

$D \rightarrow A \rightarrow C \rightarrow A \rightarrow B \rightarrow A$
 $\rightarrow C \rightarrow B \rightarrow C \rightarrow B \rightarrow C \rightarrow A$
 $\rightarrow D \rightarrow A \rightarrow D \rightarrow A \rightarrow D \rightarrow$
 $A \rightarrow \text{exit}$

experiment 1

route 1

D	→	C	→	B	→	C	→	D	→	C
→ A	→	B	→	A	→	D	→	A	→	C
→ D	→	B	→	C	→	exit				

experiment 1

route 2

D	→	C	→	A	→	D	→	C	→	B	
→	C	→	D	→	A	→	C	→	D	→	A
→	C	→	A	→	B	→	C	→	exit		

experiment 1

route 3

$$\begin{array}{ccccccc}
 C & \rightarrow & B & \rightarrow & A & \rightarrow & D & \rightarrow & A & \rightarrow & D \\
 \rightarrow & B & \rightarrow & A & \rightarrow & C & \rightarrow & B & \rightarrow & C & \rightarrow & A \\
 \rightarrow & D & \rightarrow & B & \rightarrow & C & \rightarrow & \text{exit}
 \end{array}$$

experiment 1

route 4

	D	→	C	→	A	→	B	→	D	→	A
→	B	→	D	→	A	→	D	→	B	→	D
→	B	→	D	→	A	→	C	→	D	→	A
→	D	→	B	→	C	→	A	→	D	→	A
→	exit										

$C \rightarrow A \rightarrow D \rightarrow B \rightarrow A \rightarrow D$
 $\rightarrow A \rightarrow D \rightarrow C \rightarrow B \rightarrow D \rightarrow B$
 $\rightarrow A \rightarrow D \rightarrow B \rightarrow D \rightarrow A \rightarrow$
 $B \rightarrow D \rightarrow \text{exit}$

	C	→	D	→	C	→	D	→	B	→	A
→	B	→	A	→	B	→	A	→	D	→	B
→	C	→	D	→	A	→	C	→	B	→	D
→	B	→	A	→	D	→	exit				

$$\begin{array}{ccccccc}
 D & \rightarrow & A & \rightarrow & D & \rightarrow & B & \rightarrow & C & \rightarrow & A \\
 \rightarrow & B & \rightarrow & A & \rightarrow & B & \rightarrow & A & \rightarrow & B & \rightarrow & C \\
 \rightarrow & B & \rightarrow & A & \rightarrow & B & \rightarrow & \text{exit} & & & &
 \end{array}$$

	D	→	A	→	C	→	B	→	A	→	D
→	C	→	D	→	A	→	C	→	B	→	D
→	A	→	B	→	A	→	C	→	B	→	C
→	B	→	D	→	B	→	C	→	B	→	C
→	exit										

$\begin{array}{cccccccccccc}
& C & \rightarrow & A & \rightarrow & C & \rightarrow & B & \rightarrow & A & \rightarrow & D \\
\rightarrow & A & \rightarrow & C & \rightarrow & D & \rightarrow & A & \rightarrow & D & \rightarrow & \\
B & \rightarrow & D & \rightarrow & A & \rightarrow & B & \rightarrow & C & \rightarrow & D & \rightarrow \\
C & \rightarrow & D & \rightarrow & A & \rightarrow & B & \rightarrow & \text{exit} & & &
\end{array}$

$$\begin{array}{cccccccccccc}
 D & \rightarrow & C & \rightarrow & B & \rightarrow & D & \rightarrow & B & \rightarrow & C \\
 \rightarrow & B & \rightarrow & C & \rightarrow & B & \rightarrow & D & \rightarrow & C & \rightarrow & B \\
 \rightarrow & D & \rightarrow & A & \rightarrow & B & \rightarrow & A & \rightarrow & D & \rightarrow & \\
 A & \rightarrow & D & \rightarrow & C & \rightarrow & \text{exit} & & & & &
 \end{array}$$

$\begin{array}{ccccccc} C & \rightarrow & B & \rightarrow & A & \rightarrow & D \\ \rightarrow B & \rightarrow & D & \rightarrow & C & \rightarrow & D \\ D & \rightarrow & C & \rightarrow & \text{exit} & & \\ & & & & & A & \rightarrow D \end{array}$

experiment 1

route 12

$$\begin{array}{cccccccccccc}
 & C & \rightarrow & B & \rightarrow & A & \rightarrow & D & \rightarrow & A & \rightarrow & D \\
 \rightarrow & A & \rightarrow & D & \rightarrow & B & \rightarrow & A & \rightarrow & D & \rightarrow & B \\
 \rightarrow & A & \rightarrow & C & \rightarrow & B & \rightarrow & D & \rightarrow & \text{exit} & &
 \end{array}$$

$$\begin{array}{ccccccc}
 D & \rightarrow & A & \rightarrow & D & \rightarrow & B & \rightarrow & D & \rightarrow & B \\
 \rightarrow & C & \rightarrow & B & \rightarrow & C & \rightarrow & D & \rightarrow & C & \rightarrow & D \\
 \rightarrow & B & \rightarrow & \text{exit} & & & & & & & &
 \end{array}$$

	C	→	B	→	C	→	B	→	C	→	B
→	C	→	B	→	C	→	D	→	B	→	A
→	C	→	B	→	D	→	C	→	D	→	B
→	C	→	B	→	D	→	B	→	D	→	
exit											

$\begin{array}{cccccccccccc}
& D & \rightarrow & B & \rightarrow & D & \rightarrow & B & \rightarrow & C & \rightarrow & B \\
\rightarrow & A & \rightarrow & C & \rightarrow & A & \rightarrow & D & \rightarrow & A & \rightarrow & \\
D & \rightarrow & C & \rightarrow & B & \rightarrow & C & \rightarrow & A & \rightarrow & C & \rightarrow \\
B & \rightarrow & A & \rightarrow & \text{exit} & & & & & & &
\end{array}$

	C	→	D	→	C	→	B	→	A	→	B
→	C	→	B	→	A	→	B	→	D	→	A
→	D	→	A	→	B	→	C	→	B	→	A
→	D	→	B	→	exit						

	C	→	D	→	A	→	D	→	C	→	A
→	C	→	D	→	C	→	B	→	D	→	C
→	D	→	C	→	A	→	D	→	B	→	C
→	D	→	A	→	exit						

	D	→	A	→	C	→	B	→	C	→	D
→	A	→	D	→	C	→	B	→	A	→	D
→	B	→	D	→	B	→	D	→	B	→	C
→	A	→	C	→	A	→	B	→	exit		

	C	→	B	→	D	→	B	→	C	→	A
→	C	→	B	→	D	→	A	→	B	→	C
→	D	→	A	→	B	→	C	→	A	→	D
→	A	→	B	→	C	→	exit				

C → B → C → B → D → C
 → A → D → A → D → A → C
 → A → C → A → D → C → B
 → D → A → D → A → D →
 exit

$$\begin{array}{cccccccccccc}
 C & \rightarrow & A & \rightarrow & B & \rightarrow & A & \rightarrow & C & \rightarrow & A \\
 \rightarrow & B & \rightarrow & D & \rightarrow & A & \rightarrow & D & \rightarrow & A & \rightarrow \\
 C & \rightarrow & B & \rightarrow & C & \rightarrow & D & \rightarrow & A & \rightarrow & D \\
 A & \rightarrow & D & \rightarrow & A & \rightarrow & \text{exit} & & & &
 \end{array}$$

	C	→	B	→	A	→	D	→	C	→	D
→	C	→	A	→	B	→	A	→	D	→	C
→	D	→	B	→	C	→	D	→	A	→	B
→	A	→	B	→	exit						

	C	→	B	→	D	→	A	→	D	→	A
→	D	→	A	→	D	→	A	→	C	→	B
→	D	→	A	→	D	→	C	→	A	→	D
→	A	→	D	→	B	→	C	→	exit		

	D	→	A	→	B	→	C	→	B	→	C
→	D	→	A	→	B	→	C	→	D	→	C
→	D	→	C	→	A	→	B	→	A	→	C
→	exit										

$\begin{array}{ccccccccccccccc}
& \mathbf{D} & \rightarrow & \mathbf{A} & \rightarrow & \mathbf{D} & \rightarrow & \mathbf{A} & \rightarrow & \mathbf{D} & \rightarrow & \mathbf{A} \\
\rightarrow & \mathbf{D} & \rightarrow & \mathbf{A} & \rightarrow & \mathbf{B} & \rightarrow & \mathbf{A} & \rightarrow & \mathbf{D} & \rightarrow & \mathbf{A} \\
\mathbf{A} & \rightarrow & \mathbf{D} & \rightarrow & \mathbf{A} & \rightarrow & \mathbf{D} & \rightarrow & \mathbf{exit}
\end{array}$

D	→	B	→	D	→	C	→	B	→	A
→ B	→	A	→	C	→	B	→	D	→	A
→ D	→	C	→	D	→	B	→	C	→	B
→ A	→	C	→	B	→	C	→	B	→	C
→ exit										

$$\begin{array}{ccccccc}
 C & \rightarrow & D & \rightarrow & A & \rightarrow & D & \rightarrow & A & \rightarrow & C \\
 \rightarrow & B & \rightarrow & D & \rightarrow & A & \rightarrow & B & \rightarrow & C & \rightarrow & B \\
 \rightarrow & C & \rightarrow & D & \rightarrow & \text{exit} & & & & & &
 \end{array}$$

$$\begin{array}{ccccccc}
 C & \rightarrow & B & \rightarrow & D & \rightarrow & A & \rightarrow & D & \rightarrow & B \\
 \rightarrow & C & \rightarrow & D & \rightarrow & B & \rightarrow & A & \rightarrow & C & \rightarrow & D \\
 \rightarrow & C & \rightarrow & B & \rightarrow & \text{exit} & & & & & &
 \end{array}$$

$\begin{array}{ccccccccccccccc}
& \mathbf{D} & \rightarrow & \mathbf{A} & \rightarrow & \mathbf{D} & \rightarrow & \mathbf{B} & \rightarrow & \mathbf{C} & \rightarrow & \mathbf{D} \\
\rightarrow & \mathbf{A} & \rightarrow & \mathbf{D} & \rightarrow & \mathbf{A} & \rightarrow & \mathbf{D} & \rightarrow & \mathbf{A} & \rightarrow & \mathbf{D} \\
\mathbf{D} & \rightarrow & \mathbf{A} & \rightarrow & \mathbf{B} & \rightarrow & \mathbf{D} & \rightarrow & \mathbf{A} & \rightarrow & \mathbf{D} \\
\mathbf{B} & \rightarrow & \mathbf{A} & \rightarrow & \mathbf{B} & \rightarrow & \mathbf{A} & \rightarrow & \mathbf{exit}
\end{array}$

$$\begin{array}{ccccccc}
 C & \rightarrow & A & \rightarrow & B & \rightarrow & C \\
 \rightarrow & B & \rightarrow & A & \rightarrow & D & \rightarrow \\
 \rightarrow & D & \rightarrow & A & \rightarrow & \text{exit} &
 \end{array}$$

	D	→	A	→	B	→	D	→	A	→	B
→	C	→	B	→	A	→	D	→	A	→	D
→	C	→	A	→	D	→	B	→	C	→	B
→	C	→	B	→	D	→	A	→	D	→	A
→	exit										

C → B → C → A → D → A
 → D → A → B → A → B → C
 → B → C → A → D → A → D
 → A → D → A → D → A →
 exit

D	→	A	→	D	→	A	→	D	→	B
→ A	→	D	→	A	→	D	→	B	→	
C	→	D	→	B	→	D	→	A	→	B
D	→	C	→	exit						

D	→	B	→	D	→	A	→	D	→	C
→ B	→	C	→	B	→	A	→	D	→	C
→ A	→	B	→	A	→	C	→	D	→	C
→ C	→	A	→	C	→	exit				B

$$\begin{array}{cccccccccccc}
 C & \rightarrow & B & \rightarrow & C & \rightarrow & D & \rightarrow & A & \rightarrow & C \\
 \rightarrow & B & \rightarrow & A & \rightarrow & C & \rightarrow & B & \rightarrow & C & \rightarrow & D \\
 \rightarrow & A & \rightarrow & D & \rightarrow & A & \rightarrow & D & \rightarrow & A & \rightarrow & \\
 C & \rightarrow & D & \rightarrow & B & \rightarrow & \text{exit} & & & & &
 \end{array}$$

D	→	A	→	D	→	A	→	D	→	C
→ B	→	A	→	D	→	A	→	D	→	B
→ D	→	B	→	D	→	A	→	D	→	A
→ C	→	D	→	A	→	D	→	exit		

C → B → D → A → B → D
 → C → B → D → A → D → A
 → D → A → D → A → B →
 A → B → C → B → D → B →
 exit

	D	→	C	→	B	→	C	→	A	→	C
→	A	→	C	→	A	→	C	→	D	→	A
→	D	→	B	→	C	→	D	→	B	→	C
→	D	→	A	→	C	→	B	→	exit		

	C	→	D	→	A	→	D	→	A	→	D
→	C	→	A	→	D	→	C	→	B	→	D
→	A	→	D	→	B	→	A	→	B	→	C
→	D	→	A	→	D	→	exit				

$$\begin{array}{ccccccc}
 C & \rightarrow & A & \rightarrow & D & \rightarrow & B & \rightarrow & C & \rightarrow & B \\
 \rightarrow & C & \rightarrow & A & \rightarrow & C & \rightarrow & B & \rightarrow & C & \rightarrow & B \\
 \rightarrow & D & \rightarrow & B & \rightarrow & C & \rightarrow & \text{exit} & & & & A
 \end{array}$$

	C	→	A	→	D	→	C	→	A	→	C
→	B	→	C	→	A	→	C	→	B	→	D
→	C	→	B	→	C	→	A	→	D	→	A
→	D	→	B	→	exit						

	C	→	B	→	D	→	C	→	B	→	A
→	D	→	B	→	C	→	B	→	C	→	D
→	C	→	B	→	D	→	A	→	D	→	A
→	B	→	C	→	exit						

$\begin{array}{ccccccccccc}
D & \rightarrow & A & \rightarrow & C & \rightarrow & A & \rightarrow & D & \rightarrow & B \\
\rightarrow & C & \rightarrow & A & \rightarrow & D & \rightarrow & A & \rightarrow & D & \rightarrow \\
A & \rightarrow & D & \rightarrow & A & \rightarrow & \text{exit} & & & &
\end{array}$

$$\begin{array}{ccccccccccc}
 C & \rightarrow & A & \rightarrow & C & \rightarrow & B & \rightarrow & C & \rightarrow & D \\
 \rightarrow & A & \rightarrow & D & \rightarrow & B & \rightarrow & D & \rightarrow & A & \rightarrow \\
 B & \rightarrow & D & \rightarrow & A & \rightarrow & D & \rightarrow & B & \rightarrow & C \\
 D & \rightarrow & A & \rightarrow & D & \rightarrow & \text{exit} & & & &
 \end{array}$$

$$\begin{array}{ccccccc}
 D & \rightarrow & A & \rightarrow & D & \rightarrow & C \\
 \rightarrow & D & \rightarrow & C & \rightarrow & B & \rightarrow & C \\
 \rightarrow & A & \rightarrow & \text{exit} & & & &
 \end{array}$$

C → B → D → B → C → B
 → A → C → A → C → B → D
 → A → D → A → D → A →
 B → C → D → A → exit

	C	→	A	→	B	→	C	→	B	→	C
→	A	→	B	→	A	→	B	→	C	→	B
→	C	→	B	→	D	→	C	→	B	→	D
→	A	→	B	→	C	→	B	→	exit		

C → B → D → A → D → A
 → C → B → C → A → D → A
 → B → D → A → C → B → C
 → A → D → C → D → A →
 D → exit

$D \rightarrow C \rightarrow B \rightarrow C \rightarrow B \rightarrow D$
 $\rightarrow A \rightarrow D \rightarrow C \rightarrow D \rightarrow A \rightarrow$
 $B \rightarrow A \rightarrow C \rightarrow A \rightarrow D \rightarrow B \rightarrow$
 exit