2. A perfect interleaving gives a final value of 10. The scenario table is divided by each iteration. We give the first 3 iterations, then continue in the same pattern 7 more times.

p	q	n	p.temp	q.temp
p1	q1	0	-	-
p2	$\mathbf{q}1$	0	-	-
$\mathbf{p2}$	q2	0	-	-
p3	$\mathbf{q2}$	0	0	-
p3	q3	0	0	0
p1	$\mathbf{q3}$	1	0	0
p1	q1	1	0	0
p2	\mathbf{q} 1	1	0	0
p2	q2	1	0	0
p3	$\mathbf{q2}$	1	1	0
p3	q3	1	1	1
p1	$\mathbf{q3}$	2	1	1
p1	q1	2	1	1
p2	\mathbf{q} 1	2	1	1
$\mathbf{p2}$	q2	2	1	1
p3	$\mathbf{q2}$	2	2	1
p3	q3	2	2	2
p1	$\mathbf{q3}$	3	2	2
:	:	:	:	<u>:</u>
•	•	•	•	
p1	$\mathbf{q3}$	10	9	9
p1	q1	10	9	9
(end)	\mathbf{q} 1	10	-	9
(end)	(end)	10	-	_

p	q	n	p.temp	q.temp
p1	q1	0	-	-
p2	$\mathbf{q1}$	0	-	_
p2	q2	0	-	_
p3	$\mathbf{q2}$	0	0	_
p3	q3	0	0	0
p1	q3	1	0	0
p2	q3	1	0	0
p3	q3	1	1	0
p1	q3	2	1	0
p2	q3	2	1	0
p3	q3	2	2	0
p1	q3	3	2	0
p2	q3	3	2	0
p3	q3	3	3	0
:	:	:	:	:
•	•		•	
p1	q3	8	7	0
$egin{array}{c} \mathbf{p1} \\ \mathbf{p2} \end{array}$	$\begin{array}{ c c }\hline q3\\ q3\end{array}$	8	7	$\begin{vmatrix} 0 \\ 0 \end{vmatrix}$
p2 p3	q3	8	8	$\begin{vmatrix} 0 \\ 0 \end{vmatrix}$
p0 p1	q3	9	8	0
p1 p2	$egin{array}{c} \mathbf{q}3 \ \mathbf{q}3 \end{array}$	$\begin{vmatrix} s \\ 9 \end{vmatrix}$	8	$\begin{vmatrix} 0 \\ 0 \end{vmatrix}$
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	q_1	$\begin{vmatrix} s \\ 1 \end{vmatrix}$	8	$\begin{vmatrix} 0 \\ 0 \end{vmatrix}$
$egin{array}{c} \mathbf{p2} \\ \mathbf{p2} \end{array}$	q^2	1	8	$\begin{vmatrix} 0 \\ 0 \end{vmatrix}$
p2 p3	$egin{array}{c} \mathbf{q^2} \ \mathbf{q2} \end{array}$	1	1	$\begin{vmatrix} 0 \\ 0 \end{vmatrix}$
p3	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	1	$\begin{vmatrix} 0 \\ 1 \end{vmatrix}$
p3	q1	2	1	1
p3	$egin{pmatrix} \mathbf{q}1 \\ \mathbf{q}2 \\ \end{bmatrix}$	$\begin{vmatrix} 2 \\ 2 \end{vmatrix}$	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	1
p3	$\begin{array}{c} \mathbf{q2} \\ \mathbf{q3} \end{array}$	$\begin{vmatrix} 2 \\ 2 \end{vmatrix}$	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	$\begin{vmatrix} 1 \\ 2 \end{vmatrix}$
		3	1	2
p3 p3	q1	$\begin{vmatrix} 3 \\ 3 \end{vmatrix}$	1	$\begin{vmatrix} 2 \\ 2 \end{vmatrix}$
p3	$\begin{array}{c} \mathbf{q2} \\ \mathbf{q3} \end{array}$	$\begin{vmatrix} 3 \\ 3 \end{vmatrix}$	1	$\begin{vmatrix} \frac{2}{3} \end{vmatrix}$
		4	1	3
p3 p3	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{vmatrix} 4 \\ 4 \end{vmatrix}$	1	$\begin{vmatrix} 3 \\ 3 \end{vmatrix}$
p3		$\begin{vmatrix} 4 \\ 4 \end{vmatrix}$	1	$\begin{vmatrix} 3 \\ 4 \end{vmatrix}$
	$\mathbf{q3}$			
:	:	:	:	:
p3	$\mathbf{q3}$	9	1	9
p3	$\mathbf{q1}$	10	1	9
p3	(end)	10	1	-
p1	(end)	2	1	-
(end)	(end)	2	_	_

^{4.} n can range from -k to k.