

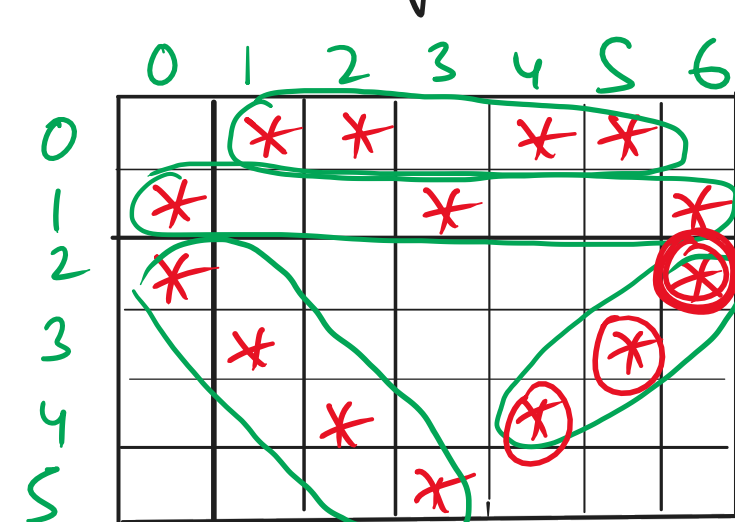
* Hamming Weight $\Rightarrow n = 11 \rightarrow \underline{1011}$
 $\{(191)LC\}$ $\left\{ \begin{array}{l} \text{No. of Set Bits} \\ \text{No. of 1 bits} \end{array} \right\}$ $hw(11) = 3$
 $\{AFU \rightarrow 2^m \rightarrow *\}$ $\text{int } hammingWeight(\underline{\text{int } n}) \{$

$hw(10) = 2$
 $hw(0) = 0$
 $hw(15) = 4$
 1111

$n = 11$ \boxed{X} $\underline{1011}$ $\text{Count} = 0$
 $\& 0001$ $0001 = T$ 11111 1
 $n \gg 1 = \frac{101}{001} \rightarrow T$ 2
 $n \gg 1 = \frac{10}{01} \rightarrow F$ 3
 $n \gg 1 = \frac{1}{1} \rightarrow T$ $TCOs$
 $1 \gg 1 \rightarrow 0$
 $Stop$

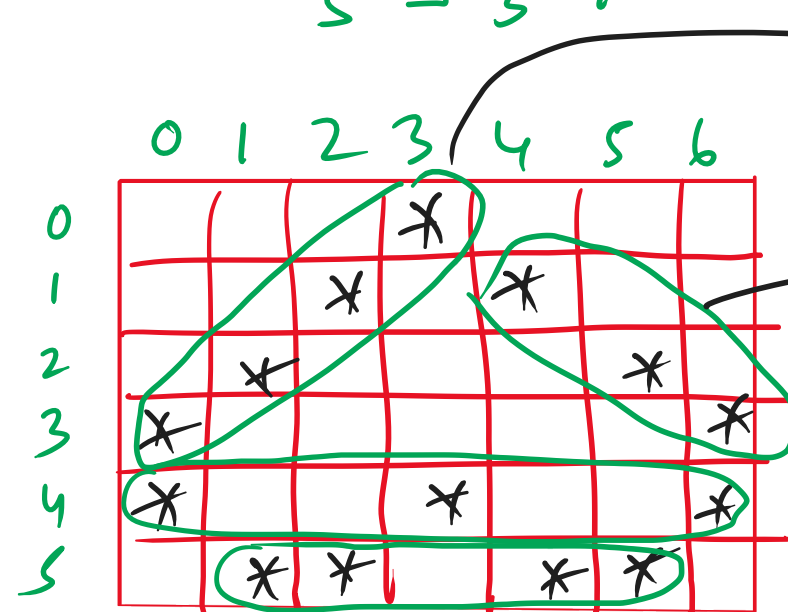
Pattern Programs \rightarrow Rule 1: Break it into similar parts.
 $\{ \text{Static} | \text{Dynamic} \}$ $(r=6, c=7)$

TCS \rightarrow NBT	4	6LPA
TCS \rightarrow Ninja	5	4LPA
TCS \rightarrow Danc	6	3-4LPA
Accenture \rightarrow	4	6-8LPA
Wipro \rightarrow	3	6-10LPA



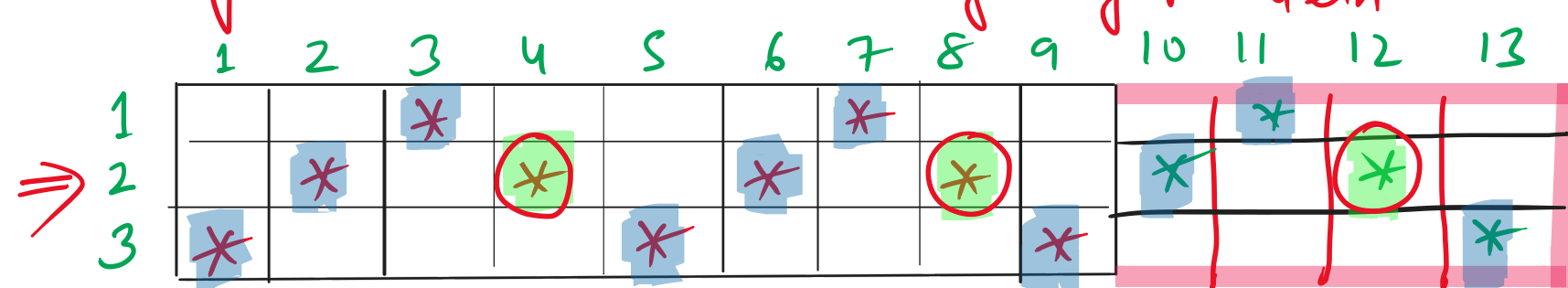
$P3$ $r-c == 2$
 $2-0 = 2$
 $3-1 = 2$
 $4-2 = 2$
 $5-3 = 2$

$P1 \rightarrow r == 0$ $c \in \{1, 2, 4, 5\}$
 $P2 \rightarrow r == 1$ $c \in \{0, 3, 6\}$
 $P4 = r+c == 8$ $c \in \{2, 6\}$
 $2+6 = 8$
 $3+5 = 8$
 $4+4 = 8$



$r+c == 3$
 $c-r = 3$
 $1-4 = -3$
 $r-c == -3$
 08
 $c-r == 3$
 $r == 4$ $c \in \{3\}$
 $r == 5$ $c \in \{2\}$

Dynamic Patterns: \rightarrow row = constant (3) \rightarrow Zig Zag Pattern \rightarrow Col: 9, 13, 17, 21, variable



Rule 2: If time is less (very less) forget rule 1: (Maths)

$r1$ 3, 7, 11
 $r2$ even no
 $r3$ 1, 5, 9, 13
 $c \cdot 4 == 3$ (4)
 $c \cdot 2 == 0$
 $c \cdot 4 == 1$ } time based

$(r+c \cdot 4 == 0)$
 $r == 2$ $c \cdot 4 == 0$ } logic based



$N=5$ Pyramid (Dynamic Pattern)

i	Spaces	Stars
1	5-1 = 4	2*1-1 = 1
2	5-2 = 3	2*2-1 = 3
3	5-3 = 2	2*3-1 = 5
4	5-4 = 1	2*4-1 = 7
5	5-5 = 0	2*5-1 = 9

for (i = 1 to N as 5)

spaces
for (sp = 1; sp <= N-i; sp++)
print(" ");
stars
for (st = 1; st <= 2*i-1; st++)
print("*");

st = *
sp = " "