

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

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

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

Pattern Programs \rightarrow Rule 1: Break it into similar parts.
 $\{ \underline{Static} | Dynamic \}$ ($r=6, c=7$)
 TCS \rightarrow N&T 4 6LPA
 TCS \rightarrow Ninja 5 4LPA
 TCS \rightarrow Danc 6 3-4LPA
 Accenture \rightarrow 4 6-8LPA
 Wipro \rightarrow 3 6-10LPA
 P1 $\rightarrow r==0 \quad c \in \{1, 2, 4, 5\}$
 $c \cdot 2 \neq 0$
 P2 $\rightarrow r==1 \quad c \in \{0, 3, 6\}$
 $P4 = r+c==8 \quad c \cdot 3 == 0$
 $\left. \begin{array}{l} 2+6 \\ 3+5 \\ 4+4 \end{array} \right\} \textcircled{8}$

$r+c==3$ $r-c== -3$
 $c-r$
 $4-1=3$ or
 $1-4=-3$ $c-r==3$
 $r==4 \quad \&\& \quad c \cdot 3 == 0$
 $r==5 \quad \&\& \quad c \cdot 3 \neq 0$

Dynamic Patterns: \rightarrow row = constant (3) \Rightarrow Zig Zag Pattern
 col: 9, 13, 17, 21, variable
 (Magic No)
 Rule 2: If time is less (very less) forget rule 1: (Maths)

$r1 \quad 3, 7, 11$
 $r2 \quad \text{even no}$
 $r3 \quad 1, 5, 9, 13$
 $\left. \begin{array}{l} c \cdot 4 == 3 \\ c \cdot 2 == 0 \\ c \cdot 4 == 1 \end{array} \right\} \text{time based}$
 $\left. \begin{array}{l} (r+c) \cdot 4 == 0 \\ r == 2 \quad \&\& \quad c \cdot 4 == 0 \end{array} \right\} \text{logic based}$

(N=5) Pyramid (Dynamic Pattern)
 for (i = 1 to N or 5)
 {
 spaces
 for (sp = 1; sp <= N-i; sp++)
 {
 print(" ");
 stars
 for (st = 1; st <= 2i-1; st++)
 {
 print("*");
 }
 }
 St = *
 Sp = " "

Developer: \Rightarrow folder
 code
 Laptop
 index.html
 script.js
 fi.txt
 requirements.txt
 login.java
 (Local Area)
 Untracked Area

VCT \rightarrow (git)
 empty repository
 folder
 git init
 \rightarrow git add filename
 git add
 git commit -m
 "message"
 (checksum)
 git log

find.txt working tree
 SCM
 online storage
 github
 master
 stable/good
 merge
 login
 TL
 Scrum master