

* Monotonic Stacks

Defⁿ Stacks where elem in are stored in ~~the~~ monotonic order (\uparrow or \downarrow) across the stack is called mono stack

Mono stack

Typical Types : Decr Mono St

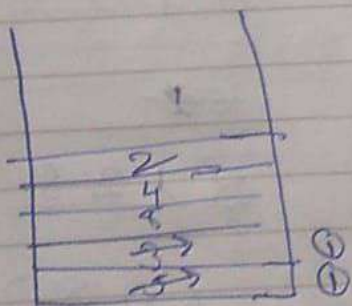
Incr Mono stack

Common appli : NGE
(next gr elem)

NSE
(next smallest elem)

Ex: Let a/p arr be : $[5, 3, 8, 4, 2]$

$\rightarrow \therefore$ NGE for this process



Rule :- If new elem $<$ stack top
 \Rightarrow add
else pop

$\textcircled{i} \Rightarrow$ obt i^{th} pop the arr
all elem were removed
 i is 1 based

\rightarrow NSE for arr ~~stat~~ arr

Rule is chna copy of arr

