

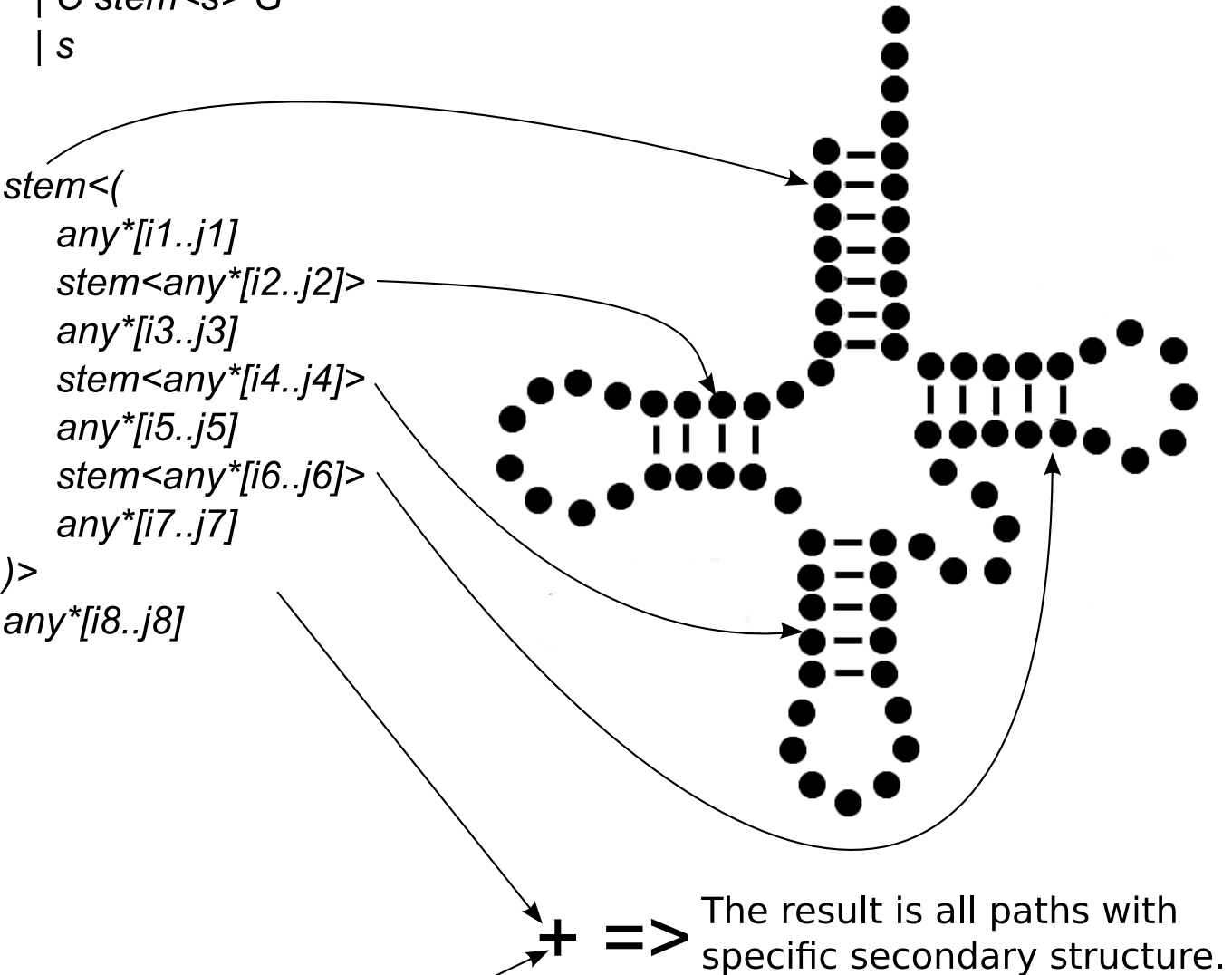
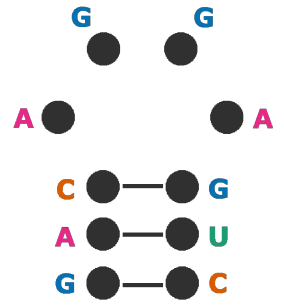
A context-free grammar for a stem:

$stem<A\ G\ G\ A>$

An arbitrary string over alphabet  $\{A,U,G,C\}$  with limited length:  **$any*[i..j]$** , where  **$i$**  is a lower bound of the length and  **$j$**  is a upper bound.

$stem<s> \rightarrow$

- $A\ stem<s>\ U$
- $| U\ stem<s>\ A$
- $| G\ stem<s>\ C$
- $| C\ stem<s>\ G$
- $| s$



Metagenomic assembly is a directed graph:

