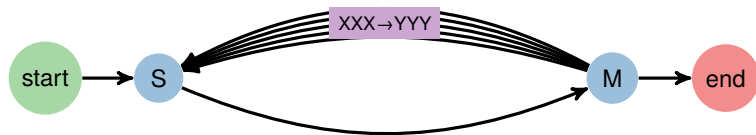**a) Substitution**

a) Insertion-Deletion

Sequences
X : input nucleotides
Y : intermediate nucleotides
Z : output nucleotides
Ø : nothing/empty sequence

Parameters
g : gap open weight
e : gap extension weight