What do you observe? Interpret and discuss your results.

With BLOSUM75 the cluster with 3 very similar sequences is compacted, therefore, identical matches over the diagonal goes down (2->1, 4->3, 1->0) and other mismatches becomes less weighted (penalty) or even a reward. This is the desired effect since clustering reduces the influences of redundant sequences.

Additionally, the dataset has a bias since A and T are the most frequent, therefore AT appears in different clusters.

The combination C-G does not appear in any column, therefore the score is -inf in both matrices.