**Solution:**

1. Process reads.csv and store it in two dictionaries.
2. First dictionary is used to map the start to a pair of start and end position. The key is the start position. The value is the pair of start and end position by using the length.
3. The second dictionary is used to store the count of the pair. The key is the pair of start and end position (value of first dictionary). The value is the count number of this pair.
4. To calculate the coverage of the location, we get the list of patterns, then return the list from the dictionary. Check whether the location is in the coverage and increase the count.

**Time complexity:**

O (n + k + k\*m)

n is the size of data in reads.csv.

k is the size of data in loci.csv.

m is the length of dictionary value list for that position.

**Optimization:**

Use the data to find patterns and analyze formulas to provide us with quicker solution.