HW 8.3 - DNA Sequence Alignment Part I (25 pts)

Compile

```
shuqiny2@circinus-25 12:28:54 ~/253P/HW8/src

$ javac DNASequenceAlignment.java

shuqiny2@circinus-25 12:29:05 ~/253P/HW8/src

$ java DNASequenceAlignment
```

input:

A G C T T G T G T G A A

output:

A _ G C T T G T G T G C A A _

```
shuqiny2@circinus-25 12:29:54 ~/253P/HW8/src

$ java DNASequenceAlignment

A G C T T G

T G C G A A

A _ G C T T G

T G C G A A _ [
```

Error detection

Illegal letters or empty string

```
A B C
Invalid DNA sequence!
Invalid DNA sequence!
```

HW 8.4 - DNA Sequence Alignment Part II (25 pts)

Compile

```
shuqiny2@circinus-25 12:35:12 ~/253P/HW8/src
$ javac DNASequenceAlignmentWithInvalidPairs.java
shuqiny2@circinus-25 12:35:21 ~/253P/HW8/src
$ java DNASequenceAlignmentWithInvalidPairs
```

```
Input:
```

T T C G C T A A G G C T

Output:

```
shuqiny2@circinus-25 12:35:21 ~/253P/HW8/src

$ java DNASequenceAlignmentWithInvalidPairs

T T C G C T

A A G G C T

T T C _ G C T

A A G G C T _ [
```

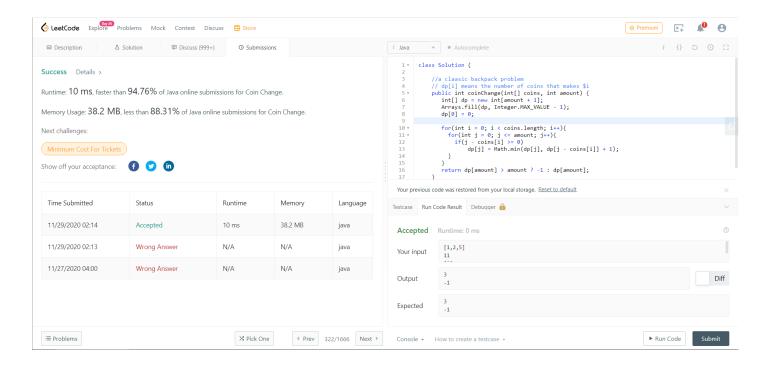
(This is an equivalent solution to sample output because T - T, C - T, C - T, and T - T are with the same penalty)

Error detection (Same as HW8.3)

Illegal letters or empty string

A B C
Invalid DNA sequence!
Invalid DNA sequence!

Leetcode 322. Coin Change



LeetCode 518. Coin Change 2

