

THESE ARE ALL THE AREAS THAT I HAD TO CHANGE TO STAY INLINE WITH CHATGPT. IT WAS INFACIT SUBTLE CHANGES:

```
...if (q>2 && sj1.length()!=0)~
...{~
...    //need to perform one less operation here if it has inserted a two digit wide mapping J=10 in first position onwards~
...    //we would need to start from q=2 onwards here.....~
...    sj1.add(j.get(temp1));~
...}~
```

TO:

```
...if (q>2 && sj1.length()!=0)~
...{~
...    //need to perform one less operation here if it has inserted a two digit wide mapping J=10 in first position onwards~
...    //we would need to start from q=2 onwards here.....~
...    sj1.add(possibleLetters.get(temp1));~
...}~
```

```
...if (q>1)~
...{~
...    sj.add(mp.get(temp1));~
...    //System.out.println("2Adding to sj: " + mp.get(temp1));~
...}~
```

TO:

```
...if (q>1)~
...{~
...    sj.add(possibleLetters.get(temp1));~
...    //System.out.println("2Adding to sj: " + mp.get(temp1));~
...}~
```

```
...//System.out.println("Int to check in the map: " + secondScenarioMappingInteger);~
...secondScenarioMapping = mp.get(secondScenarioMappingInteger);~
...mapping=secondScenarioMapping;~
...//System.out.println("Q is 1: " + secondScenarioMapping);~
...}~
```

TO:

```
...secondScenarioMapping = possibleLetters.get(secondScenarioMappingInteger);~
...mapping=secondScenarioMapping;~
...//System.out.println("Q is 1: " + secondScenarioMapping);~
...}~
```

```

... if (q==0) ~
... { ~
... //using random number to get value from possibleLetters of the Map ~
... backupFirstTemp1 = temp1; ~
... firstScenarioMapping = mp.get(backupFirstTemp1); ~
... //System.out.println("Q is 0: " + firstScenarioMapping); ~

```

TO:

```

... //using random number to get value from possibleLetters of the Map ~
... backupFirstTemp1 = temp1; ~
... firstScenarioMapping = possibleLetters.get(backupFirstTemp1); ~
... //System.out.println("Q is 0: " + firstScenarioMapping); ~
... mapping=firstScenarioMapping; ~

```

This is the range for random number selection. Retrospectively, I know that it's a very tough area to master!

```

//this will reduce the selection signficantly ~
... temp1 = rand.nextInt(possibleLettersMap.size()) + 1; ~ //this should get random number between 0 and

```

TO:

```

... temp1 = rand.nextInt(possibleLettersMap.size()); ~ //this should get random nu

```
