

# Problem 1: Encryption (applyCoder)

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Week 6 > Problem Set 6 > Problem 1: Encryption (applyCoder)

(15/15 points)

Next, define the function `applyCoder`, which applies a coder to a string of text.

## Test Cases

```
>>> applyCoder("Hello, world!", buildCoder(3))
'Khoor, zruog!'
>>> applyCoder("Khoor, zruog!", buildCoder(23))
'Hello, world!'
```

### Test 1: `applyCoder('Hello, world!', buildCoder(7))`

Output:

```
'Olssv, dvysk!'
```

### Test 2: `applyCoder('Hello, world!', buildCoder(0))`

Output:

```
'Hello, world!'
```

### Test 3: `applyCoder('Hello, world!', buildCoder(2))`

Output:

```
'Jgnnq, yqtfn!'
```

### Test 4: `applyCoder('Hello, world!', buildCoder(21))`

Output:

```
'Czggj, rjmgj!'
```

### Test 5: `applyCoder('The quiz is... hard!', buildCoder(7))`

Output:

```
'Aol xbpq pz... ohyk!'
```

### Test 6: `applyCoder('The quiz is... hard!', buildCoder(0))`

Output:

```
'The quiz is... hard!'
```

**Test 7: applyCoder('The quiz is... hard!', buildCoder(2))**

Output:

```
'Vjg swkb ku... jctf!'
```

**Test 8: applyCoder('The quiz is... hard!', buildCoder(21))**

Output:

```
'Ocz lpdu dn... cvmy!'
```

**Test 9: applyCoder('12 jackdaws quizzed my sphinx!?', buildCoder(7))**

Output:

```
'12 qhjrkh dz xbp gglk tf zwopue!?'
```

**Test 10: applyCoder('12 jackdaws quizzed my sphinx!?', buildCoder(0))**

Output:

```
'12 jackdaws quizzed my sphinx!?'
```

**Test 11: applyCoder('12 jackdaws quizzed my sphinx!?', buildCoder(2))**

Output:

```
'12 lcemfcyu swkbbgf oa urj k pz!?'
```

**Test 12: applyCoder('12 jackdaws quizzed my sphinx!?', buildCoder(21))**

Output:

```
'12 evxfyv rn l p duzy ht nkcd is!?'
```

**Test 13: applyCoder('tV ?,3aSG7AxbzXL5kiF84sw-mnEK!', buildCoder(7))**

Output:

```
'aC ?,3hZN7HeigES5rpM84zd-tuLR!'
```

**Test 14: applyCoder('tV ?,3aSG7AxbzXL5kiF84sw-mnEK!', buildCoder(0))**

Output:

```
'tV ?,3aSG7AxbzXL5kiF84sw-mnEK!'
```

**Test 15: applyCoder('tV ?,3aSG7AxbzXL5kiF84sw-mnEK!', buildCoder(2))**

Output:

```
'vX ?,3cUI7CzdbZN5mkH84uy-opGM!'
```

**Test 16: applyCoder('tV ?,3aSG7AxbzXL5kiF84sw-mnEK!', buildCoder(21))**

Output:

```
'oQ ?,3vNB7VswuSG5fdA84nr-hiZF!'
```