- Encryption/decryption with client's key:

```
KNAPSACK ENCRYPTION

Plaintext: Hello
Private Key: [2, 7, 11, 21, 42, 89, 180, 354]
n: 588
m: 881
Inverse mod n: 442
Public Key: [295, 592, 301, 14, 28, 353, 120, 236]

Ciphertext: [620, 1482, 1274, 1274, 1630]

KNAPSACK DECRYPTION

Ciphertext: [620, 1482, 1274, 1274, 1630]
Private Key: [2, 7, 11, 21, 42, 89, 180, 354]
Public Key: [295, 592, 301, 14, 28, 353, 120, 236]
n: 588
m: 881

Plaintext: Hello

Encryption ciphertext: [620, 1482, 1274, 1274, 1630]
Decryption plaintext: Hello
```

- Encryption/decryption with server's key:

```
KNAPSACK ENCRYPTION

Plaintext: Hello
Private Key: [2, 3, 6, 13, 27, 52, 105, 210]
n: 588
m: 881
Inverse mod n: 442
Public Key: [295, 2, 4, 596, 18, 622, 70, 140]

Ciphertext: [20, 768, 646, 646, 856]

KNAPSACK DECRYPTION

Ciphertext: [20, 768, 646, 646, 856]
Private Key: [2, 3, 6, 13, 27, 52, 105, 210]
Public Key: [79, 328, 237, 304, 19, 378, 167]
n: 588
m: 881

Plaintext: Hello

Encryption ciphertext: [20, 768, 646, 646, 856]
Decryption plaintext: Hello
```

NOTE: I took out the public key from the decrypt function after this screenshot as it was redundant