

SERVER

```
Server of Goldson
Connected by ('127.0.0.1', 50665)
Waiting on Client response.....
Message received: 100 Hello message
Sent 100 Hello message
Waiting on Client response.....
Message received: 110 Generator: 13, Prime: 65213
Message sent: 111 Generator and Prime Rcvd
Waiting on Client response.....
Message received: 120 PubKey 2926
Secret Key: 65184
Message sent: 120 PubKey 26265
Waiting on Client response.....
Message received: 130 Ciphertext 30758
Server Secret 65184
Client public 2926
SymmetricKey 31188
Decrypted Ciphertext: 51960
Message sent: 130 Ciphertext 10284
Let's Start.....
Waiting on Client response.....
Plain Text(SymmKey) : 111100111010100
Generated Key(Binary) : 100001100000000
Generated Key(decimal): 17152
Cipher Text : 011101011010100
Message sent: 140 One Time Pad: 011101011010100
Waiting on Client response.....
Received: 155 OK
Waiting on Client response.....
Received: 200 Roll Dice
Server Roll: [4, 1, 5, 1, 2]
Waiting on Client response.....
Received: 300 Bid Val: 1 Freq: 1
Enter c to Challenge or b to Bid b
Enter the Value: 1
Enter the Frequency: 3
Waiting on Client response.....
Client challenge your bid.
Server is the Winner !!!! 4, 1, 5, 1, 2
Server Roll: 4, 1, 5, 1, 2
Client Roll: 6, 4, 3, 1, 4
Invalid data received. Closing
Press any ENTER to continue
```

CLIENT

Client of Goldson

The dice in this program have a face value in the range 1--6.
No error checking is done, so ensure that the bids are in the correct range.
Follow the on-screen instructions.

```
Enter a valid prime between 1024 and 65536: 65213
Enter a positive integer less than the prime just entered: 13
Valid
Waiting on Server response.....
Message sent: 110 Generator: 13, Prime: 65213
Waiting on Server response.....
Secret Key: 49427
Sent: 120 PubKey 2926
Waiting on Server response.....
Client Secret 49427
Server public 26265
SymmetricKey 31188
Nonce 51960
Message sent: 130 Ciphertext 30758
Waiting on Server response.....
Ciphertext received: 10284
Decrypted Ciphertext: 51955
Final status code: 150 OK
Message sent: 150 OK
Let's Start.....
Waiting on Server response.....
Onetime pad Cipher 011101011010100
Enter One Time Pad Key, base 2 or 10: 17152
Key is correct. Decryption was successful
Plain text/SymmKey (binary): 111100111010100
Plain text/SymmKey (decimal): 31188
Waiting on Server response.....
105 Received: 105 Hello message
Roll all the dice? (y/n): y
Waiting on Server response.....
205 Received: 205 Roll Dice ACK 6, 4, 3, 1, 4,
Client Roll: [6, 4, 3, 1, 4]
Enter the Value: 1
Enter the Frequency: 1
Waiting on Server response.....
Waiting on Server response.....
Received: 305 Bid ACK Val: 1 Freq: 3
Enter c to Challenge or b to Bid c
Server roll is: 4, 1, 5, 1, 2
Client's roll is: 6, 4, 3, 1, 4
Server is the Winner !!!! 4, 1, 5, 1, 2
Waiting on Server response.....
Invalid data received. Closing
Press any ENTER to continue
```