```
from __future__ import print_function
# Variables Used
sharedPrime = 23
sharedBase = 5
aliceSecret = 6
bobSecret = 15


# Begin
print( "Publicly Shared Variables:")
print( "Publicly Shared Prime: " , sharedPrime )
print( "Publicly Shared Base: " , sharedBase )
```

```
Publicly Shared Variables:
Publicly Shared Prime:  23
Publicly Shared Base:  5
```

```
# Alice Sends Bob A = g^a mod p
A = (sharedBase**aliceSecret) % sharedPrime
print  ("\n Alice Sends Over Public Chanel: " , A )
```

```
 Alice Sends Over Public Chanel:  8
```

```
# Bob Sends Alice B = g^b mod p
B = (sharedBase ** bobSecret) % sharedPrime
print(" \n Bob Sends Over Public Chanel: ", B )
```

```
 Bob Sends Over Public Chanel:  19
```

```
print( "\n------------\n" )
print( "Privately Calculated Shared Secret:" )
# Alice Computes Shared Secret: s = B^a mod p
aliceSharedSecret = (B ** aliceSecret) % sharedPrime
print( "Alice Shared Secret: ", aliceSharedSecret )
```

```

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Privately Calculated Shared Secret:
Alice Shared Secret:  2
```

+ Code + Text

```
bobSharedSecret = (A**bobSecret) % sharedPrime
print( " Bob Shared Secret: ", bobSharedSecret )
```

```
 Bob Shared Secret:  2
```

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