

Assignment 2

Sample outputs:

P	B	A	B
23	29	13	18

```
Enter a prime number (p): 23
Enter the base (b): 29
Enter your private secret key (A): 13
Enter the other user's private secret key (B): 19

Public key for User A (remainder): 13
Public key for User B (remainder): 18

Shared secret key for (A): 2
Shared secret key for (B): 2
The shared secret keys are identical.
```

P	B	A	B
23	5	6	15

```
Enter a prime number (p): 44
The number you entered is not a prime number. Please try again.

Enter a prime number (p): 23
Enter the base (b): 34
The base you entered is not a prime number. Please try again.

Enter the base (b): 5
Enter your private secret key (A): 6
Enter the other user's private secret key (B): 15

Public key for User A (remainder): 8
Public key for User B (remainder): 19

Shared secret key for (A): 2
Shared secret key for (B): 2
The shared secret keys are identical.
```