

## DIFFIE - HELLMAN Key Exchange

```
print("Both Parties Agree To A Single Prime No.")
prime = int(input(" Enter A Prime No To Be Considered : "))
print("Both Must Agree With A Single Primitive Root To Use")
root = int(input(" Enter The Primitive Root : "))
```

```
Both Parties Agree To A Single Prime No.
Enter A Prime No To Be Considered : 31
Both Must Agree With A Single Primitive Root To Use
Enter The Primitive Root : 11
```

```
alicesecret = int(input("Enter A Secret No From User 1 : "))
bobsecret = int(input("Enter A Secret no From User 2 : "))
print('\n')
```

```
Enter A Secret No From User 1 : 98
Enter A Secret no From User 2 : 69
```

```
print("Party1's Public Key -> A = root^alicesecre*mod(prime)")
alicepublic = (root**alicesecret)%prime
print("Party1's Public Key Is : ", alicepublic, "\n")
```

```
Party1's Public Key -> A = root^alicesecre*mod(prime))
Party1's Public Key Is : 19
```

```
print("Party2's Public Key -> A = root^bobsecre*mod(prime)")
bobpublic = (root**bobsecret)%prime
print("Partv2's Public Kev Is : ". bobpublic, "\n")
```

Saved successfully!



```
Party2's Public Key Is : 25
```

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✓ 0s completed at 6:47 PM ● ✕

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