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```
In [ ]: endnum = 5
        for i in range(1,endnum+1):
            print(str(i) + ":" + str(i**2))
```

```
1:1
2:4
3:9
4:16
5:25
```

```
In [ ]: import sympy
        for i in range(1,endnum+1):
            if not sympy.isprime(i):
                print(str(i) + ":" + str(i**2))
```

```
1:1
4:16
```

```
In [ ]: squares = [i**2 for i in range(1,endnum)]
        for i,i2 in enumerate(squares):
            print(i,":",squares[i])
```

```
0 : 1
1 : 4
2 : 9
3 : 16
4 : 25
```

```
In [ ]: non_prime_squares = [i**2 for i in range(1,endnum) if not sympy.isprime(i)]
        print(non_prime_squares)
```

```
[1, 16]
```

```
In [ ]: import numpy as np
```

```
In [ ]: A = np.array([[1,2],[3,4],[5,6]])
        B = np.array([[7,8,9,1],[1,2,3,4]])
        print(np.dot(A,B))
```

```
[[ 9 12 15  9]
 [25 32 39 19]
 [41 52 63 29]]
```

```
In [ ]: B_1 = np.array([[3,2],[5,4],[3,1]])
        print(np.matmul(A,B))
```

```
[[ 9 12 15  9]
 [25 32 39 19]
 [41 52 63 29]]
```

```
In [ ]: D = np.random.randint(10, size=(5,7))
```