1, Normalize a vector:

```
import numpy as np
import numpy.linalg as la

B = np.array([[1, 2, 3],
              [2, 0, 2]])

print la.norm(B[0])
print la.norm(B[1])
print la.norm(B[:, 0])
print la.norm(B[:, 1])
print la.norm(B[:, 2])
```

```
3.7416573867739413
2.8284271247461903
2.23606797749979
2.0
3.605551275463989
```

2, Dot product:

```
print B[:, 1]
print B[:, 0]

print np.dot(B[:, 1], B[:, 0])
```

```
[2 0]
[1 2]
2
```

3. Set to zeros:

```
B = [[1, 2, 3],
     [2, 0, 2]]

print np.zeros_like(B)
```

```
[[0 0 0]
 [0 0 0]]
```