

1. How do you perform matrix multiplication on the numpy arrays A and B

Ans: `np.dot(A,B)`

2. What values does the variable out take if the following lines of code are run:

```
In [1]: import numpy as np
```

```
In [2]: X=np.array([[1,0,1],[2,2,2]])
out=X[0:2,2]
out
```

```
Out[2]: array([1, 2])
```

Ans: `array([1, 2])`

3. What is the value of Z after the following code is run:

```
In [3]: X=np.array([[1,0],[0,1]])
Y=np.array([[2,2],[2,2]])
Z=np.dot(X,Y)
```

```
In [4]: Z
```

```
Out[4]: array([[2, 2],
               [2, 2]])
```

Ans: `array([[2, 2],[2, 2]])`