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

In [16]:
```
a=np.array([1,2,3])
print(a)
```

```
[1 2 3]
```

In [51]:
```
b=np.array([(1.2,2,4),(5,6,7)], dtype=float)
print(b)

o=np.array([(1.2,2.4,4),(5,6,7)], dtype=float)
print(o)
```

```
[[1.2 2.  4. ]
 [5.  6.  7. ]]
[[1.2 2.4 4. ]
 [5.  6.  7. ]]
```

In [10]:
```
c=np.array([[(1,2.3,4),(5,6,7)] ,[(3,7,9),(1,10,9)]],dtype=float)
print(c)
```

```
[[[ 1.   2.3  4. ]
  [ 5.   6.   7. ]]

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

In [13]:
```
y=np.ones((2,3,4),dtype=np.int16)
y
```

Out[13]:
```
array([[[1, 1, 1, 1],
        [1, 1, 1, 1],
        [1, 1, 1, 1]],

       [[1, 1, 1, 1],
        [1, 1, 1, 1],
        [1, 1, 1, 1]]], dtype=int16)
```

In [32]:
```
d=np.arange(10,25,5)
print(d)
```

```
[10 15 20]
```

In [17]:
```
e=np.linspace(0,2,9)
e
```

Out[17]:
```
array([0.  , 0.25, 0.5 , 0.75, 1.  , 1.25, 1.5 , 1.75, 2.  ])
```

In [18]:
```
f=np.full((2,2),7)
f
```

```
df.describe()
```

	population
count	3.000000e+00
mean	3.714289e+09
std	6.422542e+09
min	1.234560e+05
25%	6.234567e+06
50%	1.234568e+07
75%	5.571372e+09
max	1.113040e+10

```
df.cumsum()
```

	country	Capital	population
0	india	new delhi	11130398373
1	indiaUSA	new delhiwashington dc	11142744051
2	indiaUSAbrazil	new delhiwashington dcbrasilia	11142867507

```
s.div(s3,fill_value=2)
```

```
a    3.000000
b    1.000000
c    2.500000
d    2.000000
f    0.333333
g    0.285714
h    0.250000
i    0.222222
dtype: float64
```

```
s.mul(s3,fill_value=0)
```

```
a    0.0
b    0.0
c    0.0
d    0.0
f    0.0
g    0.0
h    0.0
i    0.0
dtype: float64
```