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

In [2]:
```
#Get SID Number
validSid = False
while validSid == False:
    sid = input("Enter Student ID Number: ")
    if sid.isnumeric() == False:
        validSid = False
    elif len(sid) > 7:
        validSid = False
    elif len(sid) < 7:
        validSid = False
    else:
        validSid = True
```

In [3]:
```
#Create value by removing everything except the last 2 characters
val = int(sid[-2:])
```

In [4]:
```
if val < 10:
    val = val + 100
```

In [5]:
```
print(val)
```

```
67
```

In [6]:
```
#Create array a using np.arange
a = np.arange(val)
```

In [7]:
```
#Check shape of array a - should be e.g.:(67,)
a.shape
```

Out[7]: (67,)

In [8]:
```
print(a)
```

```
[ 0  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47
 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66]
```

In [9]:
```
#Convert from 1D Array to 2D Array with 1 Row
a2 = a[np.newaxis, :]
```

In [10]:
```
print(a2)
```

```
[[ 0  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
  24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47
  48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66]]
```

In [11]:
```
#Check shape of array a - should be e.g.:(1, 67)
a2.shape
```

Out[11]: (1, 67)

In [12]:
```
#Save a
a3 = a2
```

In [13]:
```
print(a3)
```

```
[[ 0  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
  24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47
  48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66]]
```

In [14]:
```
a3.shape
```

Out[14]: (1, 67)

In [ ]:
```

```