In[ ]:=
```
n = 3
Y = Array[y, n]
```

Out[ ]= 3

Out[ ]= {y[1], y[2], y[3]}

In[ ]:=
```
F = Function[{t, z}, {z[[2]] * z[[3]] * Sin[t] - z[[1]] * z[[2]] * z[[3]],
    - z[[1]] * z[[3]] * Sin[t] + (1 / 20) * z[[1]] * z[[3]],
    z[[1]] ^ 2 * z[[2]] - (1 / 20) * z[[1]] * z[[2]]}]
```

Out[ ]=
$$\text{Function}\left[\{t, z\}, \left\{z[\![2]\!]\, z[\![3]\!]\, \text{Sin}[t] - z[\![1]\!]\, z[\![2]\!]\, z[\![3]\!],\ -z[\![1]\!]\, z[\![3]\!]\, \text{Sin}[t] + \frac{1}{20}\, z[\![1]\!]\, z[\![3]\!],\ z[\![1]\!]^2\, z[\![2]\!] - \frac{1}{20}\, z[\![1]\!]\, z[\![2]\!]\right\}\right]$$

In[ ]:=
```
K1 = Array[k, n]
```

Out[ ]= {k[1], k[2], k[3]}

In[ ]:=
```
K2 = Array[k, n, n + 1]
```

Out[ ]= {k[4], k[5], k[6]}