Define 100 arrays of length 10. The kth array has integers elements that goes from $10k$ to $10(k + 1) - 1$. For instance:

- array 1 ($k = 0$): [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
- array 2 ($k = 1$): [10, 11, 12, 13, 14, 15, 16, 17, 18, 19]
- etc ...

Solution 1: using `np.split`

```
In [1]:  import numpy as np
         np.split(np.arange(10*100), 100)
```

```
Out[1]:    [array([0, 1, 2, 3, 4, 5, 6, 7, 8, 9]),
            array([10, 11, 12, 13, 14, 15, 16, 17, 18, 19]),
            array([20, 21, 22, 23, 24, 25, 26, 27, 28, 29]),
            array([30, 31, 32, 33, 34, 35, 36, 37, 38, 39]),
            array([40, 41, 42, 43, 44, 45, 46, 47, 48, 49]),
            array([50, 51, 52, 53, 54, 55, 56, 57, 58, 59]),
            array([60, 61, 62, 63, 64, 65, 66, 67, 68, 69]),
            array([70, 71, 72, 73, 74, 75, 76, 77, 78, 79]),
            array([80, 81, 82, 83, 84, 85, 86, 87, 88, 89]),
            array([90, 91, 92, 93, 94, 95, 96, 97, 98, 99]),
            array([100, 101, 102, 103, 104, 105, 106, 107, 108, 109]),
            array([110, 111, 112, 113, 114, 115, 116, 117, 118, 119]),
            array([120, 121, 122, 123, 124, 125, 126, 127, 128, 129]),
            array([130, 131, 132, 133, 134, 135, 136, 137, 138, 139]),
            array([140, 141, 142, 143, 144, 145, 146, 147, 148, 149]),
            array([150, 151, 152, 153, 154, 155, 156, 157, 158, 159]),
            array([160, 161, 162, 163, 164, 165, 166, 167, 168, 169]),
            array([170, 171, 172, 173, 174, 175, 176, 177, 178, 179]),
            array([180, 181, 182, 183, 184, 185, 186, 187, 188, 189]),
            array([190, 191, 192, 193, 194, 195, 196, 197, 198, 199]),
            array([200, 201, 202, 203, 204, 205, 206, 207, 208, 209]),
            array([210, 211, 212, 213, 214, 215, 216, 217, 218, 219]),
            array([220, 221, 222, 223, 224, 225, 226, 227, 228, 229]),
            array([230, 231, 232, 233, 234, 235, 236, 237, 238, 239]),
            array([240, 241, 242, 243, 244, 245, 246, 247, 248, 249]),
            array([250, 251, 252, 253, 254, 255, 256, 257, 258, 259]),
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            array([270, 271, 272, 273, 274, 275, 276, 277, 278, 279]),
            array([280, 281, 282, 283, 284, 285, 286, 287, 288, 289]),
            array([290, 291, 292, 293, 294, 295, 296, 297, 298, 299]),
            array([300, 301, 302, 303, 304, 305, 306, 307, 308, 309]),
            array([310, 311, 312, 313, 314, 315, 316, 317, 318, 319]),
            array([320, 321, 322, 323, 324, 325, 326, 327, 328, 329]),
            array([330, 331, 332, 333, 334, 335, 336, 337, 338, 339]),
            array([340, 341, 342, 343, 344, 345, 346, 347, 348, 349]),
            array([350, 351, 352, 353, 354, 355, 356, 357, 358, 359]),
            array([360, 361, 362, 363, 364, 365, 366, 367, 368, 369]),
```

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       array([380, 381, 382, 383, 384, 385, 386, 387, 388, 389]),
       array([390, 391, 392, 393, 394, 395, 396, 397, 398, 399]),
       array([400, 401, 402, 403, 404, 405, 406, 407, 408, 409]),
       array([410, 411, 412, 413, 414, 415, 416, 417, 418, 419]),
       array([420, 421, 422, 423, 424, 425, 426, 427, 428, 429]),
       array([430, 431, 432, 433, 434, 435, 436, 437, 438, 439]),
       array([440, 441, 442, 443, 444, 445, 446, 447, 448, 449]),
       array([450, 451, 452, 453, 454, 455, 456, 457, 458, 459]),
       array([460, 461, 462, 463, 464, 465, 466, 467, 468, 469]),
       array([470, 471, 472, 473, 474, 475, 476, 477, 478, 479]),
       array([480, 481, 482, 483, 484, 485, 486, 487, 488, 489]),
       array([490, 491, 492, 493, 494, 495, 496, 497, 498, 499]),
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       array([610, 611, 612, 613, 614, 615, 616, 617, 618, 619]),
       array([620, 621, 622, 623, 624, 625, 626, 627, 628, 629]),
       array([630, 631, 632, 633, 634, 635, 636, 637, 638, 639]),
       array([640, 641, 642, 643, 644, 645, 646, 647, 648, 649]),
       array([650, 651, 652, 653, 654, 655, 656, 657, 658, 659]),
       array([660, 661, 662, 663, 664, 665, 666, 667, 668, 669]),
       array([670, 671, 672, 673, 674, 675, 676, 677, 678, 679]),
       array([680, 681, 682, 683, 684, 685, 686, 687, 688, 689]),
       array([690, 691, 692, 693, 694, 695, 696, 697, 698, 699]),
       array([700, 701, 702, 703, 704, 705, 706, 707, 708, 709]),
       array([710, 711, 712, 713, 714, 715, 716, 717, 718, 719]),
       array([720, 721, 722, 723, 724, 725, 726, 727, 728, 729]),
       array([730, 731, 732, 733, 734, 735, 736, 737, 738, 739]),
```

```
array([740, 741, 742, 743, 744, 745, 746, 747, 748, 749]),
array([750, 751, 752, 753, 754, 755, 756, 757, 758, 759]),
array([760, 761, 762, 763, 764, 765, 766, 767, 768, 769]),
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array([780, 781, 782, 783, 784, 785, 786, 787, 788, 789]),
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array([800, 801, 802, 803, 804, 805, 806, 807, 808, 809]),
array([810, 811, 812, 813, 814, 815, 816, 817, 818, 819]),
array([820, 821, 822, 823, 824, 825, 826, 827, 828, 829]),
array([830, 831, 832, 833, 834, 835, 836, 837, 838, 839]),
array([840, 841, 842, 843, 844, 845, 846, 847, 848, 849]),
array([850, 851, 852, 853, 854, 855, 856, 857, 858, 859]),
array([860, 861, 862, 863, 864, 865, 866, 867, 868, 869]),
```

Solution 2: using comprehensions

In [2]:
```python
tuple(np.arange(10*k, 10*(k+1)) for k in range(100))
```

```
array([890, 891, 892, 893, 894, 895, 896, 897, 898, 899]),
array([900, 901, 902, 903, 904, 905, 906, 907, 908, 909]),
array([910, 911, 912, 913, 914, 915, 916, 917, 918, 919]),
array([920, 921, 922, 923, 924, 925, 926, 927, 928, 929]),
array([930, 931, 932, 933, 934, 935, 936, 937, 938, 939]),
array([940, 941, 942, 943, 944, 945, 946, 947, 948, 949]),
array([950, 951, 952, 953, 954, 955, 956, 957, 958, 959]),
array([960, 961, 962, 963, 964, 965, 966, 967, 968, 969]),
array([970, 971, 972, 973, 974, 975, 976, 977, 978, 979]),
array([980, 981, 982, 983, 984, 985, 986, 987, 988, 989]),
array([990, 991, 992, 993, 994, 995, 996, 997, 998, 999])]
```

```
Out[2]:  (array([0, 1, 2, 3, 4, 5, 6, 7, 8, 9]),
          array([10, 11, 12, 13, 14, 15, 16, 17, 18, 19]),
          array([20, 21, 22, 23, 24, 25, 26, 27, 28, 29]),
          array([30, 31, 32, 33, 34, 35, 36, 37, 38, 39]),
          array([40, 41, 42, 43, 44, 45, 46, 47, 48, 49]),
          array([50, 51, 52, 53, 54, 55, 56, 57, 58, 59]),
          array([60, 61, 62, 63, 64, 65, 66, 67, 68, 69]),
          array([70, 71, 72, 73, 74, 75, 76, 77, 78, 79]),
          array([80, 81, 82, 83, 84, 85, 86, 87, 88, 89]),
          array([90, 91, 92, 93, 94, 95, 96, 97, 98, 99]),
          array([100, 101, 102, 103, 104, 105, 106, 107, 108, 109]),
          array([110, 111, 112, 113, 114, 115, 116, 117, 118, 119]),
          array([120, 121, 122, 123, 124, 125, 126, 127, 128, 129]),
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          array([170, 171, 172, 173, 174, 175, 176, 177, 178, 179]),
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          array([190, 191, 192, 193, 194, 195, 196, 197, 198, 199]),
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array([610, 611, 612, 613, 614, 615, 616, 617, 618, 619]),
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array([630, 631, 632, 633, 634, 635, 636, 637, 638, 639]),
array([640, 641, 642, 643, 644, 645, 646, 647, 648, 649]),
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array([660, 661, 662, 663, 664, 665, 666, 667, 668, 669]),
array([670, 671, 672, 673, 674, 675, 676, 677, 678, 679]),
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array([710, 711, 712, 713, 714, 715, 716, 717, 718, 719]),
array([720, 721, 722, 723, 724, 725, 726, 727, 728, 729]),
array([730, 731, 732, 733, 734, 735, 736, 737, 738, 739]),
```

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array([750, 751, 752, 753, 754, 755, 756, 757, 758, 759]),
array([760, 761, 762, 763, 764, 765, 766, 767, 768, 769]),
array([770, 771, 772, 773, 774, 775, 776, 777, 778, 779]),
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array([830, 831, 832, 833, 834, 835, 836, 837, 838, 839]),
array([840, 841, 842, 843, 844, 845, 846, 847, 848, 849]),
array([850, 851, 852, 853, 854, 855, 856, 857, 858, 859]),
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array([910, 911, 912, 913, 914, 915, 916, 917, 918, 919]),
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array([970, 971, 972, 973, 974, 975, 976, 977, 978, 979]),
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array([990, 991, 992, 993, 994, 995, 996, 997, 998, 999]))
```