

For Radix sort, we sort by digits. How do we get the digit from a number?

Extract digit from a number expressed in base 10:

- `def extractDigit(number, place):`
- `temp = number / place`
- `return temp % 10`

Example:

7429 - extract digit in the 3rd place -> base  $10^2$

Remember that

$$7429 = 7 * 10^3 + 4 * 10^2 + 2 * 10^1 + 9 * 10^0$$

Then:

$$7429 / 100 = 74$$

$$74 \bmod (10) = 4$$