

## QUIZ 5

### COMP9021 PRINCIPLES OF PROGRAMMING

```
$ python3 quiz_5.py
Input either a strictly positive integer
or a nonempty list of strictly positive integers: 1
    In base 2, 1 reads as 1
Incorrect encoding!
$ python3 quiz_5.py
Input either a strictly positive integer
or a nonempty list of strictly positive integers: 12345
    In base 2, 12345 reads as 11000000111001
Incorrect encoding!
$ python3 quiz_5.py
Input either a strictly positive integer
or a nonempty list of strictly positive integers: 3
    In base 2, 3 reads as 11
    It encodes: [1]
$ python3 quiz_5.py
Input either a strictly positive integer
or a nonempty list of strictly positive integers: [1]
    In base 2, [1] reads as [1]
    It is encoded by 3
$ python3 quiz_5_sol.py
Input either a strictly positive integer
or a nonempty list of strictly positive integers: 51315663
    In base 2, 51315663 reads as 11000011110000001111001111
    It encodes: [4891]
$ python3 quiz_5_sol.py
Input either a strictly positive integer
or a nonempty list of strictly positive integers: [4891]
    In base 2, [4891] reads as [1001100011011]
    It is encoded by 51315663
$ python3 quiz_5.py
Input either a strictly positive integer
or a nonempty list of strictly positive integers: 424896
    In base 2, 424896 reads as 1100111101111000000
    It encodes: [11, 24]
$ python3 quiz_5.py
Input either a strictly positive integer
or a nonempty list of strictly positive integers: [11, 24]
    In base 2, [11, 24] reads as [1011, 11000]
    It is encoded by 424896
```

```
$ python3 quiz_5.py
```

```
Input either a strictly positive integer
```

```
or a nonempty list of strictly positive integers: 857310204
```

```
    In base 2, 857310204 reads as 110011000110011000001111111100
```

```
    It encodes: [10, 20, 30]
```

```
$ python3 quiz_5.py
```

```
Input either a strictly positive integer
```

```
or a nonempty list of strictly positive integers: [10, 20, 30]
```

```
    In base 2, [10, 20, 30] reads as [1010, 10100, 11110]
```

```
    It is encoded by 857310204
```

```
$ python3 quiz_5.py
```

```
Input either a strictly positive integer
```

```
or a nonempty list of strictly positive integers: 13609683913728
```

```
    In base 2, 13609683913728 reads as 11000110000011000000011000000000110000000000
```

```
    It encodes: [2, 4, 8, 16, 32]
```

```
$ python3 quiz_5.py
```

```
Input either a strictly positive integer
```

```
or a nonempty list of strictly positive integers: [2, 4, 8, 16, 32]
```

```
    In base 2, [2, 4, 8, 16, 32] reads as [10, 100, 1000, 10000, 100000]
```

```
    It is encoded by 13609683913728
```