## QUIZ 2

## COMP9021 PRINCIPLES OF PROGRAMMING

## Sample outputs

```
$ python3 quiz_2.py
Input a nonnegative integer: 0
The encoded set is: {}
The derived encoded set is: {}
$ python3 quiz_2.py
Input a nonnegative integer: 1
The encoded set is: {0}
The derived encoded set is: {0}
$ python3 quiz_2.py
Input a nonnegative integer: 2
The encoded set is: {-1}
The derived encoded set is: {-1}
$ python3 quiz_2.py
Input a nonnegative integer: 3
The encoded set is: \{-1, 0\}
The derived encoded set is: {-1}
$ python3 quiz_2.py
Input a nonnegative integer: 4
The encoded set is: {1}
The derived encoded set is: {1}
$ python3 quiz_2.py
Input a nonnegative integer: 5
The encoded set is: {0, 1}
The derived encoded set is: {0, 1}
$ python3 quiz_2.py
Input a nonnegative integer: 6
The encoded set is: {-1, 1}
The derived encoded set is: {-1, 0}
Input a nonnegative integer: 7
The encoded set is: \{-1, 0, 1\}
The derived encoded set is: {-1, 0}
Input a nonnegative integer: 100
The encoded set is: \{-3, 1, 3\}
The derived encoded set is: {-3, -2, 1}
$ python3 quiz_2.py
Input a nonnegative integer: 123
The encoded set is: \{-3, -2, -1, 0, 2, 3\}
The derived encoded set is: \{-6, -5, -4, -3, -1\}
Input a nonnegative integer: 1234
The encoded set is: \{-4, -1, 2, 3, 5\}
The derived encoded set is: \{-5, -4, -3, 0, 5\}
```