QUIZ 5

COMP9021 PRINCIPLES OF PROGRAMMING

```
$ python3 quiz_5.py
Input a positive integer: 0
The encoded set is: {}
The derived encoded set is: {}
  It is encoded by: 0
$ python3 quiz_5.py
Input a positive integer: 1
The encoded set is: {0}
The derived encoded set is: {0}
  It is encoded by: 1
$ python3 quiz_5.py
Input a positive integer: 2
The encoded set is: {-1}
The derived encoded set is: {-1}
  It is encoded by: 2
$ python3 quiz_5.py
Input a positive integer: 3
The encoded set is: \{-1, 0\}
The derived encoded set is: {-1}
  It is encoded by: 2
$ python3 quiz_5.py
Input a positive integer: 4
The encoded set is: {1}
The derived encoded set is: {1}
  It is encoded by: 4
$ python3 quiz_5.py
Input a positive integer: 5
The encoded set is: {0, 1}
The derived encoded set is: {0, 1}
  It is encoded by: 5
$ python3 quiz_5.py
Input a positive integer: 6
The encoded set is: \{-1, 1\}
The derived encoded set is: {-1, 0}
  It is encoded by: 3
$ python3 quiz_5.py
Input a positive integer: 7
The encoded set is: \{-1, 0, 1\}
The derived encoded set is: {-1, 0}
  It is encoded by: 3
```

Date: Trimester 1, 2019.

```
$ python3 quiz_5.py
```

Input a positive integer: 123

The encoded set is: $\{-3, -2, -1, 0, 2, 3\}$

The derived encoded set is: $\{-6, -5, -4, -3, -1\}$

It is encoded by: 2722

\$ python3 quiz_5.py

Input a positive integer: 1234

The encoded set is: $\{-4, -1, 2, 3, 5\}$

The derived encoded set is: $\{-5, -4, -3, 0, 5\}$

It is encoded by: 1697