QUIZ 3

COMP9021 PRINCIPLES OF PROGRAMMING

Reading the number written in base 8 from right to left, keeping the leading 0's, if any:

- 0: Move North1: Move North-East
- 2: Move East
- **3:** Move South-East
- 4: Move South
- **5:** Move South West
- **6:** Move West
- 7: Move North-West

We start from a position that is the unique position where the switch is on.

Moving to a position switches on to off, off to on there.

```
$ python3 quiz_3.py
Enter a non-strictly negative integer: 0
Keeping leading 0's, if any, in base 8, 0 reads as 0.
0
0
$ python3 quiz_3.py
Enter a non-strictly negative integer: 00
Keeping leading 0's, if any, in base 8, 00 reads as 00.
0
0
$ python3 quiz_3.py
Enter a non-strictly negative integer: 0256
Keeping leading 0's, if any, in base 8, 0256 reads as 0400.
$ python3 quiz_3.py
Enter a non-strictly negative integer: 032
Keeping leading 0's, if any, in base 8, 032 reads as 040.
$ python3 quiz_3.py
Enter a non-strictly negative integer: 3654
Keeping leading 0's, if any, in base 8, 3654 reads as 7106.
0
• 0
0
00
```

Date: Term 3, 2019.

```
$ python3 quiz_3.py
Enter a non-strictly negative integer: 100738324
Keeping leading 0's, if any, in base 8, 100738324 reads as 600222424.
0 • • 0 0
00000
• 0 0 0 0
$ python3 quiz_3.py
Enter a non-strictly negative integer: 73776
Keeping leading 0's, if any, in base 8, 73776 reads as 220060.
000
\circ \bullet \bullet
00
• 0 •
$ python3 quiz_3.py
Enter a non-strictly negative integer: 7704322
Keeping leading 0's, if any, in base 8, 7704322 reads as 35307402.
0
0
• •
• 0
$ python3 quiz_3.py
Enter a non-strictly negative integer: 206537612
Keeping leading 0's, if any, in base 8, 206537612 reads as 1423701614.
\circ \bullet \bullet \bullet
. . . .
• 0 0 •
\bullet \circ \bullet \bullet
\circ \bullet \bullet \bullet
$ python3 quiz_3.py
Enter a non-strictly negative integer: 000123456789
Keeping leading 0's, if any, in base 8, 000123456789 reads as 000726746425.
\circ \bullet \bullet \bullet
\circ \bullet \bullet \bullet
\circ \bullet \bullet \circ
0 • 0 0
0 • 0 0
\bullet \bullet \circ \bullet
```