QUIZ 2 (worth 3.5 marks)

COMP9021 PRINCIPLES OF PROGRAMMING

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

0: Move North
1: 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_2.py
Enter a non-strictly negative integer: 0
Keeping leading 0's, if any, in base 8, 0 reads as 0.

○
○

$ python3 quiz_2.py
Enter a non-strictly negative integer: 00
Keeping leading 0's, if any, in base 8, 00 reads as 00.

○
○
○

$ python3 quiz_2.py
Enter a non-strictly negative integer: 0256
Keeping leading 0's, if any, in base 8, 0256 reads as 0400.

○

$ python3 quiz_2.py
Enter a non-strictly negative integer: 032
Keeping leading 0's, if any, in base 8, 032 reads as 040.

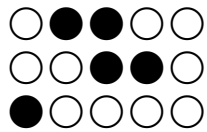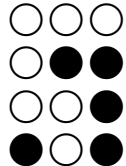$ python3 quiz_2.py
Enter a non-strictly negative integer: 3654
Keeping leading 0's, if any, in base 8, 3654 reads as 7106.

○ ●
● ○
○ ●
○ ○

Enter a non-strictly negative integer: 100738324
Keeping leading 0's, if any, in base 8, 100738324 reads as 600222424.

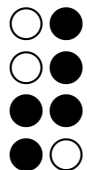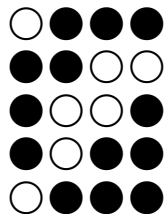○●●○○
○○●●○
●○○○○

Enter a non-strictly negative integer: 73776
Keeping leading 0's, if any, in base 8, 73776 reads as 220060.

○○○
○●●
○○●
●○●

Enter a non-strictly negative integer: 7704322
Keeping leading 0's, if any, in base 8, 7704322 reads as 35307402.

○●
○●
●●
●○

Enter a non-strictly negative integer: 206537612
Keeping leading 0's, if any, in base 8, 206537612 reads as 1423701614.

○●●●
●●○○
●○○●
●○●●
○●●●

Enter a non-strictly negative integer: 000123456789
Keeping leading 0's, if any, in base 8, 000123456789 reads as 000726746425.

○●●●
○●●●
○●●○
○●○○
○●○○
●●○●