**Chess Moves**

Write a program that takes as input:

* The name of a chess piece (King, Queen, Bishop, Knight, Rook, Pawn)
* A starting digit, 0 to 9.

As output the program should produce a list of all the legal phone numbers that can be   
generated by moving the piece around a standard phone pad, starting from the given digit. You should also supply the number of different phone numbers that are produced for the case of a Queen starting on digit ‘5’.

A legal phone number has the following requirements:

* Must be 10 digits long
* Can contain only digits (no \* or #)

The phone pad layout is

1 2 3   
4 5 6   
7 8 9   
\* 0 #

A legal move is defined as any move that would normally be legal for the piece in chess,   
with the following additions:

* Staying in place is a legal move for all pieces
* When a Pawn reaches the top row, it becomes a Queen.
* For the case where the piece is a Pawn, starting on one of the bottom two rows (i.e. any of the digits 7, 8, 9 and 0), the Pawn may move either one or two spaces forward the first time it moves .