Result = ???????? \& $00111000=00 ? ? ? 000$
Looking at the truth table for the above:

| Bit Bit Bit |  |  |  |
| :---: | :---: | :---: | :---: |
| 5 | 4 | 3 | Result |
| $----------------~$ |  |  |  |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 8 |
| 0 | 1 | 0 | 16 |
| 0 | 1 | 1 | 24 |
| 1 | 0 | 0 | 32 |
| 1 | 0 | 1 | 40 |
| 1 | 1 | 0 | 48 |
| 1 | 1 | 1 | 56 |

To reduce the variable to a number 0-7, just divide the result by 8 (since the least significant bit is 3 , and $2^{\wedge} 3$ is 8 ). This can then be used to access a table of index lengths (i.e. LengthTable[Result/8]) so that the appropriate move is made.

