Chess Table Structure

Array(64) =>

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 |
| 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 |
| 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 |
| 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 |

**Starting Positions:**

1. **Pawn**:

White: 8,9,10,11,12,13,14,15

Black: 48,49,50,51,52,53,54,55

1. **Rook**:

White: 0,7

Black: 56,63

1. **Knight**:

White: 1,6

Black: 57,62

1. **Bishop**:

White: 2,5

Black: 58,61

1. **Queen**:

White: 3

Black: 59

1. **King**:

White: 4

Black: 60

**Movement:**

1. **Pawn**:

Directions:

1. Forward – x+8 (white) , x-8 (black)
2. Forward Left – x + 7 (white), x-7 (black)
3. Forward Right – x + 9 (white), x-9 (black)
4. **Rook**:

Directions:

1. Left – x-1
2. Right – x+1
3. Up – x-8
4. Down – x+8
5. **Knight**:
   1. Bottom Right 1: (x+10)
   2. Bottom Right 2: (x+17)
   3. Bottom Left 1: (x+6)
   4. Bottom Left 2: (x+15)
   5. Top Right 1: (x-6)
   6. Top Right 2: (x-15)
   7. Top Left 1: (x-10)
   8. Top Left 2: (x-17)
6. **Bishop**:

Directions:

1. Top Left – x-9
2. Top Right – x-7
3. Bottom Left – x+7
4. Bottom Right – x+9
5. **Queen**:

Directions:

1. Left – x-1
2. Right – x+1
3. Up – x-8
4. Down – x+8
5. Top Left – x-9
6. Top Right – x-7
7. Bottom Left – x+7
8. Bottom Right – x+9
9. **King**:
   1. Left – x-1
   2. Right – x+1
   3. Up – x-8
   4. Down – x+8
   5. Top Left – x-9
   6. Top Right – x-7
   7. Bottom Left – x+7
   8. Bottom Right – x+9