

```

chan exchange[1:n,1:n](int row, column, state);

process cell[i = 1 to n, j = 1 to n] {
  int state; # initialize to dead or alive
  declarations of other variables;
  for [k = 1 to numGenerations] {
    # exchange state with 8 neighbors
    for [p = i-1 to i+1, q = j-1 to j+1]
      if (p != q)
        send exchange[p,q](i, j, state);
    for [p = 1 to 8] {
      receive exchange[i,j](row, column, value);
      save value of neighbor's state;
    }
    update local state using rules in text;
  }
}

```

Figure 9.4 The Game of Life.