

```

1  int mandel(
2      Complex c,
3      int depth
4  ) {
5      int count = 0;
6      Complex z = 0;
7      for (int k = 0; k < depth; k++) {
8          if (abs(z) >= 2.0) {
9              break;
10         }
11         z = z*z + c;
12         count++;
13     }
14     return count;
15 }
16
17 void serial_mandel(
18     int p[][],
19     int max_row,
20     int max_col,
21     int depth
22 ) {
23     for (int i = 0; i < max_row; ++i) {
24         for (int j = 0; j < max_col; ++j)
25             p[i][j] = mandel(Complex(scale(i), scale(j)),
26                               depth);
27     }

```

LISTING 4.11

Serial implementation of Mandelbrot in C.