

digraph Automaton

```
{
    node[fontsize=20]      edge[fontsize=20, arrowhead = open]
    rankdir = LR;
    size = "8.000000, 10.000000";
    center = 1;
    nodesep = "0.2"
    ratio = .6;

    0 [shape=doublecircle, style=bold, fontsize=20, margin=0,
label=<0>]
    1 [shape=rectangle, style=solid, fontsize=20, margin=0, label=<-1>]
    2 [shape=rectangle, style=solid, fontsize=20, margin=0, label=<1>]
    3 [shape=rectangle, style=solid, fontsize=20, margin=0, label=<k-1-
&beta;>]
    4 [shape=rectangle, style=solid, fontsize=20, margin=0, label=<k-
&beta;>]
    5 [shape=rectangle, style=solid, fontsize=20, margin=0, label=<k+1-
&beta;>]
    6 [shape=rectangle, style=solid, fontsize=20, margin=0, label=<-
&beta;^2+(k-1)&beta;+k-1>]
    7 [shape=rectangle, style=solid, fontsize=20, margin=0, label=<-
&beta;^2+(k-1)&beta;+k>]
    8 [shape=rectangle, style=solid, fontsize=20, margin=0, label=<-
&beta;^2+k&beta;>]
    9 [shape=rectangle, style=solid, fontsize=20, margin=0, label=<-
&beta;^2+k&beta;-1>]
    10 [shape=rectangle, style=solid, fontsize=20, margin=0, label=<-
&beta;^2+k&beta;+1>]
    11 [shape=rectangle, style=solid, fontsize=20, margin=0, label=<-
&beta;^2+(k-1)&beta;+k+1>]

    0 -> 0 [label=<0>]
    0 -> 2 [label=<1>]
    0 -> 3 [label=<-&beta; + k-1>]
    0 -> 4 [label=<-&beta; + k>]
    0 -> 5 [label=<-&beta; + k+1>]
    0 -> 1 [label=<-1>]
    1 -> 3 [label=<k-1>]
    1 -> 4 [label=<k>]
    2 -> 2 [label=<-&beta; + 1>]
    3 -> 6 [label=<k-1>]
    3 -> 7 [label=<k>]
    4 -> 8 [label=<0>]
    4 -> 10 [label=<1>]
    4 -> 6 [label=<-&beta; + k-1>]
    4 -> 7 [label=<-&beta; + k>]
    4 -> 11 [label=<-&beta; + k+1>]
    4 -> 9 [label=<-1>]
    5 -> 10 [label=<-&beta; + 1>]
    6 -> 6 [label=<k>]
    7 -> 9 [label=<0>]
    7 -> 8 [label=<1>]
    7 -> 10 [label=<2>]
    7 -> 6 [label=<-&beta; + k>]
    7 -> 7 [label=<-&beta; + k+1>]
    7 -> 11 [label=<-&beta; + k+2>]
    8 -> 1 [label=<0>]
```

```
8 -> 0 [label=<1>]
8 -> 2 [label=<2>]
8 -> 3 [label=<-&beta; + k>]
8 -> 4 [label=<-&beta; + k+1>]
8 -> 5 [label=<-&beta; + k+2>]
9 -> 3 [label=<k>]
10 -> 0 [label=<-&beta; + 1>]
10 -> 2 [label=<-&beta; + 2>]
11 -> 8 [label=<-&beta; + 1>]
11 -> 10 [label=<-&beta; + 2>]
}
```