

Samsung Remote Codes

Model#: BN59-01301a

These codes were obtain using Arduino IDE and the sketch used is from Rick Osgood. The only code verified was the power button.

power::

470, 458,

62, 168,

62, 168,

72, 158,

62, 54,

62, 52,

62, 54,

60, 54,

62, 54,

60, 170,

62, 168,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 54,

62, 168,

62, 52,

62, 54,

62, 52,

62, 54,
62, 52,
62, 54,
58, 172,
58, 58,
58, 170,
60, 172,
58, 172,
60, 170,
58, 172,
58, 172,
58, 4816,
468, 458,
62, 168,
62, 170,
60, 170,
60, 54,
62, 54,
60, 54,
62, 54,
60, 54,
62, 168,
62, 168,
62, 168,
62, 54,

60, 54,
62, 54,
60, 54,
62, 52,
62, 54,
62, 168,
62, 54,
60, 54,
62, 54,
60, 54,
62, 54,
60, 54,
62, 168,
62, 54,
58, 172,
60, 170,
60, 170,
60, 170,
62, 168,
62, 168,
62, 5483,
8, 0};

source::

470, 458,

62, 170,

60, 168,

62, 170,

60, 54,

62, 54,

60, 54,

62, 54,

60, 54,

62, 168,

62, 168,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 170,

60, 54,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 170,

58, 172,

58, 172,

62, 168,

60, 170,

62, 168,

58, 172,

60, 4814,

470, 458,

62, 168,

62, 168,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 52,

62, 170,

60, 170,

60, 170,

60, 54,

62, 54,

60, 54,

62, 54,

62, 52,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 54,

62, 168,

62, 168,

62, 168,

62, 170,

60, 168,

62, 168,

62, 170,

60, 0};

1::

468, 458,

62, 168,

62, 168,

62, 170,

60, 54,

62, 52,

62, 54,

62, 52,

62, 54,

62, 168,

60, 170,

62, 168,

62, 54,

60, 54,

62, 52,

62, 54,

62, 52,

62, 54,

60, 54,

62, 168,

62, 54,

62, 54,

60, 54,

60, 54,

62, 54,

60, 170,

62, 168,

60, 54,

62, 170,

60, 168,

62, 170,

60, 170,

60, 170,

60, 4812,

470, 458,

62, 168,

62, 168,

62, 168,

62, 54,

62, 52,

62, 54,

60, 54,

62, 54,

60, 170,

60, 170,

62, 168,

62, 52,

62, 54,

62, 52,

62, 54,

60, 54,

62, 54,

60, 54,

62, 168,

62, 54,

62, 52,

62, 54,
62, 52,
62, 54,
60, 170,
60, 170,
62, 54,
60, 168,
60, 170,
62, 170,
58, 172,
58, 172,
58, 0};

2::

468, 458,
62, 168,
62, 170,
60, 168,
62, 54,
62, 52,
62, 54,
60, 54,
62, 54,
60, 170,
62, 168,

62, 168,
62, 54,
60, 54,
62, 54,
72, 42,
62, 54,
60, 170,
60, 54,
62, 168,
62, 54,
60, 54,
62, 54,
60, 54,
62, 54,
60, 54,
62, 168,
62, 54,
60, 170,
60, 170,
60, 170,
60, 170,
60, 170,
62, 0};

468, 458,

62, 168,

62, 168,

62, 170,

60, 54,

62, 54,

60, 54,

62, 52,

62, 54,

62, 168,

62, 168,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 52,

62, 54,

62, 168,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 52,

62, 170,

60, 54,

62, 54,

60, 170,

60, 170,

60, 170,

60, 170,

62, 168,

62, 4812,

468, 458,

62, 168,

62, 170,

60, 170,

60, 54,

62, 52,

62, 54,

62, 52,

62, 54,

60, 170,

62, 168,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,
60, 54,
62, 168,
62, 168,
62, 52,
62, 54,
62, 52,
62, 54,
62, 54,
60, 170,
60, 54,
62, 54,
60, 170,
60, 170,
60, 170,
62, 168,
60, 170,
62, 0};

4::

470, 456,
64, 168,
60, 170,
64, 166,
64, 50,

64, 52,

64, 50,

64, 52,

60, 54,

62, 168,

64, 166,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

70, 44,

62, 54,

60, 54,

62, 168,

62, 52,

62, 54,

62, 52,

62, 54,

62, 168,

60, 170,

62, 168,

62, 54,

60, 168,

62, 170,
60, 170,
60, 170,
60, 0};

5::

4, 2818,
8, 299,
468, 458,
62, 168,
62, 170,
60, 170,
60, 54,
62, 52,
62, 54,
62, 52,
62, 54,
62, 168,
62, 168,
62, 168,
62, 54,
60, 54,
62, 54,
60, 54,
62, 54,

60, 170,

60, 54,

62, 54,

60, 170,

60, 54,

62, 54,

60, 54,

60, 56,

58, 56,

60, 170,

58, 172,

60, 56,

58, 172,

58, 172,

58, 172,

58, 172,

58, 0};

6::

472, 456,

64, 166,

64, 166,

64, 168,

62, 52,

64, 52,

62, 52,

64, 52,

60, 54,

62, 168,

64, 166,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 54,

62, 168,

62, 54,

60, 170,

60, 54,

62, 54,

60, 54,

62, 54,

62, 168,

62, 52,

62, 168,

62, 54,

62, 168,

62, 168,

62, 168,
62, 168,
62, 4814,
480, 446,
64, 166,
64, 168,
60, 170,
62, 52,
62, 52,
74, 42,
62, 52,
62, 54,
62, 168,
62, 168,
62, 168,
62, 54,
60, 54,
62, 54,
60, 54,
62, 54,
60, 54,
62, 168,
62, 54,
60, 170,
60, 54,

62, 54,
60, 54,
62, 54,
60, 170,
60, 54,
62, 168,
62, 54,
60, 170,
62, 168,
62, 168,
62, 168,
62, 0};

7::

468, 458,
62, 168,
62, 168,
62, 168,
62, 54,
62, 52,
62, 54,
60, 54,
62, 54,
60, 170,
62, 168,

62, 168,
62, 52,
62, 54,
62, 52,
62, 54,
62, 52,
62, 54,
62, 52,
62, 168,
62, 168,
62, 54,
62, 52,
62, 54,
60, 54,
62, 170,
60, 168,
62, 54,
62, 52,
62, 170,
60, 170,
60, 170,
60, 170,
60, 0);

8::

6, 6152,
16, 5405,
468, 460,
60, 170,
72, 158,
62, 168,
62, 52,
62, 54,
62, 52,
62, 54,
60, 54,
62, 170,
60, 170,
60, 170,
60, 54,
62, 54,
60, 54,
62, 54,
60, 54,
62, 168,
62, 54,
60, 170,
62, 168,
62, 52,
62, 54,

60, 54,
62, 54,
60, 54,
62, 168,
62, 54,
62, 52,
62, 168,
60, 172,
58, 172,
70, 160,
58, 5737,
8, 0};

9::

472, 456,
64, 166,
64, 166,
64, 166,
64, 52,
62, 52,
64, 50,
64, 52,
64, 50,
62, 168,
62, 170,

62, 168,

64, 50,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 170,

60, 170,

60, 170,

62, 52,

62, 54,

62, 52,

62, 54,

62, 168,

60, 54,

62, 54,

60, 54,

62, 168,

62, 168,

62, 168,

62, 168,

62, 4812,

470, 456,

64, 166,

64, 166,

64, 166,

64, 52,

64, 50,

64, 52,

64, 50,

64, 52,

60, 170,

60, 170,

62, 168,

62, 52,

62, 54,

62, 52,

62, 54,

60, 54,

62, 54,

60, 170,

60, 170,

62, 168,

62, 52,

62, 54,

62, 52,

62, 54,

60, 170,

62, 52,

62, 54,
60, 54,
62, 168,
62, 168,
62, 168,
62, 170,
60, 0};

0::

472, 456,
64, 166,
64, 166,
64, 166,
64, 52,
64, 50,
64, 52,
64, 50,
64, 52,
64, 166,
64, 166,
64, 166,
64, 50,
62, 54,
60, 54,
62, 54,

60, 54,
62, 168,
62, 54,
62, 52,
62, 54,
60, 170,
72, 42,
62, 54,
60, 54,
62, 54,
60, 170,
62, 168,
62, 168,
60, 54,
62, 170,
60, 168,
62, 168,
62, 4812,
472, 456,
64, 166,
64, 166,
64, 166,
64, 52,
62, 52,
64, 50,

64, 52,
64, 50,
62, 168,
64, 166,
64, 168,
60, 54,
62, 52,
62, 54,
62, 52,
62, 54,
62, 168,
62, 52,
62, 54,
62, 52,
62, 170,
60, 54,
62, 52,
62, 54,
62, 52,
62, 168,
62, 170,
60, 170,
60, 54,
62, 168,
62, 168,

62, 168,

62, 0};

-::

16, 48,

6, 3346,

472, 456,

64, 166,

64, 166,

64, 166,

64, 52,

74, 40,

64, 50,

64, 52,

64, 50,

64, 166,

64, 168,

62, 168,

64, 50,

62, 54,

60, 54,

62, 54,

60, 54,

62, 168,

62, 168,

62, 54,
60, 54,
62, 52,
62, 170,
60, 54,
62, 54,
60, 54,
62, 54,
60, 170,
60, 170,
60, 170,
62, 52,
62, 168,
62, 170,
60, 4812,
472, 456,
64, 166,
64, 166,
64, 166,
64, 52,
64, 50,
64, 52,
64, 50,
64, 52,
64, 166,

60, 170,

62, 168,

62, 52,

62, 54,

60, 54,

62, 54,

60, 54,

62, 168,

62, 168,

62, 54,

62, 52,

62, 54,

62, 168,

62, 52,

62, 54,

62, 52,

62, 54,

60, 170,

62, 168,

62, 168,

62, 54,

60, 170,

60, 170,

60, 0};

pre-ch::

468, 458,

62, 170,

60, 170,

62, 166,

66, 50,

64, 52,

64, 50,

64, 52,

62, 52,

64, 166,

64, 166,

64, 166,

64, 52,

60, 54,

62, 54,

60, 54,

62, 54,

60, 170,

60, 170,

60, 54,

62, 54,

60, 170,

60, 54,

62, 54,

60, 54,
62, 54,
60, 54,
62, 168,
62, 168,
62, 54,
60, 170,
60, 170,
60, 170,
62, 4812,
470, 456,
64, 166,
64, 166,
64, 166,
64, 52,
62, 52,
62, 54,
62, 54,
60, 54,
62, 168,
62, 168,
62, 168,
62, 54,
60, 54,
62, 54,

60, 54,
62, 52,
62, 168,
62, 168,
62, 54,
62, 52,
62, 170,
60, 54,
62, 54,
60, 54,
62, 52,
62, 54,
62, 168,
62, 168,
62, 54,
60, 170,
60, 168,
62, 170,
60, 0};

mute::

472, 454,
66, 166,
64, 166,
64, 166,

64, 50,

64, 52,

64, 50,

64, 52,

64, 50,

64, 166,

64, 166,

64, 168,

62, 52,

62, 52,

62, 54,

62, 52,

62, 54,

62, 168,

60, 170,

62, 168,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 52,

62, 54,

62, 52,

62, 54,

62, 168,

62, 168,

62, 168,

62, 168,

62, 4812,

470, 458,

64, 166,

64, 166,

64, 166,

64, 50,

64, 52,

64, 50,

64, 52,

64, 50,

64, 166,

64, 166,

64, 166,

66, 50,

64, 50,

62, 54,

60, 54,

62, 54,

60, 170,

62, 168,

62, 168,

62, 168,
62, 54,
60, 54,
62, 54,
60, 54,
62, 54,
60, 54,
62, 52,
62, 54,
62, 168,
62, 168,
62, 168,
62, 168,
62, 413,
8, 0);

ch-list::

470, 456,
64, 168,
60, 170,
60, 170,
64, 50,
64, 52,
64, 50,
62, 54,

64, 50,
64, 166,
62, 170,
60, 170,
62, 52,
64, 50,
64, 52,
64, 50,
64, 52,
62, 168,
60, 170,
64, 52,
62, 166,
64, 52,
64, 166,
64, 166,
62, 54,
60, 54,
64, 52,
62, 168,
64, 50,
64, 166,
64, 52,
62, 52,
64, 166,

62, 4812,
468, 460,
62, 168,
62, 166,
66, 166,
64, 50,
64, 52,
62, 52,
64, 52,
62, 52,
64, 166,
64, 166,
64, 166,
64, 52,
64, 50,
64, 52,
62, 52,
64, 52,
64, 166,
64, 166,
64, 50,
64, 166,
64, 52,
64, 166,
64, 166,

64, 52,
64, 50,
64, 52,
64, 166,
64, 50,
64, 166,
64, 52,
64, 50,
64, 166,
64, 0};

vol+::

468, 458,
62, 170,
60, 170,
62, 168,
60, 54,
62, 54,
60, 54,
62, 54,
60, 54,
62, 168,
62, 168,
62, 170,
60, 54,

62, 54,

60, 54,

62, 54,

60, 54,

62, 168,

62, 168,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 52,

62, 54,

62, 52,

62, 54,

62, 168,

62, 168,

62, 168,

62, 168,

62, 168,

62, 4812,

470, 458,

62, 168,

62, 168,

62, 168,

62, 54,

62, 52,

62, 54,

62, 52,

62, 54,

62, 168,

60, 170,

62, 168,

62, 52,

62, 54,

62, 52,

62, 54,

62, 52,

62, 168,

62, 170,

60, 170,

60, 54,

62, 52,

62, 54,

62, 52,

62, 54,

60, 54,

62, 54,

60, 54,

60, 172,

60, 168,

62, 168,

62, 170,

60, 170,

60, 0};

vol-::

468, 460,

60, 168,

62, 168,

62, 170,

60, 54,

62, 54,

60, 54,

72, 44,

60, 54,

62, 168,

62, 168,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 52,

62, 168,

62, 170,

60, 54,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 52,

62, 54,

62, 168,

62, 52,

60, 172,

60, 170,

58, 170,

62, 170,

58, 4814,

468, 460,

62, 168,

60, 170,

60, 170,

62, 54,

60, 54,

62, 52,

62, 54,

62, 52,

62, 168,

62, 168,

62, 170,

60, 54,

62, 52,

62, 54,

62, 52,

62, 54,

62, 168,

62, 168,

62, 54,

60, 170,

60, 54,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 170,

60, 54,

62, 168,

62, 168,

62, 168,

62, 168,

62, 0};

ch up::

472, 456,

60, 170,

62, 168,

60, 170,

62, 56,

58, 54,

64, 54,

58, 56,

58, 58,

60, 170,

60, 170,

58, 170,

60, 58,

58, 56,

58, 56,

60, 56,

58, 56,

60, 56,

60, 166,

62, 56,

58, 58,

60, 54,

62, 54,

58, 56,
58, 58,
58, 172,
58, 56,
58, 170,
60, 172,
58, 170,
62, 170,
62, 168,
60, 172,
58, 4812,
470, 458,
60, 170,
60, 170,
62, 170,
60, 56,
58, 56,
60, 54,
60, 56,
58, 58,
60, 170,
60, 168,
62, 170,
58, 56,
60, 56,

58, 58,
58, 56,
58, 58,
56, 58,
58, 170,
60, 58,
58, 56,
60, 54,
60, 56,
58, 56,
62, 54,
58, 172,
58, 58,
56, 172,
62, 168,
62, 166,
64, 170,
58, 172,
58, 172,
58, 0};

ch down::

470, 456,
64, 166,
66, 166,

62, 168,

64, 50,

64, 52,

74, 40,

64, 52,

62, 52,

62, 168,

62, 168,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 52,

62, 54,

62, 52,

62, 54,

62, 52,

62, 170,

60, 54,

62, 54,

60, 54,

62, 168,

62, 168,

62, 168,

62, 168,

62, 54,

60, 170,

60, 170,

62, 168,

62, 4812,

470, 456,

66, 164,

64, 168,

62, 168,

64, 50,

64, 50,

66, 50,

64, 50,

62, 54,

62, 168,

62, 168,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

72, 42,

62, 54,

60, 54,
62, 54,
60, 170,
60, 54,
62, 52,
62, 54,
62, 168,
62, 168,
62, 168,
62, 168,
62, 54,
60, 170,
62, 168,
60, 170,
62, 3256,
28, 408,
14, 22,
6, 190,
6, 0};

sleep::

470, 458,
64, 166,
64, 166,
64, 166,

64, 50,

74, 42,

64, 50,

64, 52,

64, 50,

64, 166,

62, 168,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 170,

62, 168,

62, 52,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 170,

60, 170,

62, 168,
60, 170,
62, 168,
62, 168,
62, 4812,
470, 456,
66, 166,
64, 166,
64, 166,
64, 50,
64, 52,
64, 50,
64, 52,
60, 54,
62, 168,
62, 168,
62, 170,
60, 54,
62, 54,
62, 52,
62, 52,
62, 54,
62, 168,
62, 168,
62, 54,

60, 54,

62, 52,

62, 54,

62, 52,

62, 54,

62, 52,

62, 54,

62, 168,

60, 170,

62, 168,

62, 168,

62, 168,

62, 168,

62, 0};

home::

472, 456,

64, 166,

64, 166,

64, 166,

64, 52,

64, 50,

64, 52,

64, 50,

64, 52,

64, 166,
64, 166,
64, 166,
64, 52,
62, 52,
62, 54,
60, 54,
62, 54,
60, 168,
62, 54,
62, 52,
62, 168,
62, 170,
60, 170,
60, 168,
62, 54,
62, 52,
62, 170,
60, 170,
60, 54,
62, 54,
60, 54,
62, 52,
62, 168,
62, 4812,

472, 456,

64, 166,

64, 166,

64, 166,

64, 52,

62, 52,

64, 50,

64, 52,

62, 52,

64, 166,

64, 168,

60, 170,

60, 54,

62, 52,

62, 54,

62, 52,

62, 54,

62, 168,

62, 52,

62, 54,

60, 170,

62, 168,

62, 168,

62, 168,

62, 54,

60, 54,
62, 168,
62, 168,
62, 52,
62, 54,
62, 52,
62, 54,
62, 168,
62, 0};

guide::

470, 458,
64, 166,
64, 166,
64, 166,
64, 50,
64, 52,
64, 50,
64, 52,
64, 50,
64, 166,
64, 166,
64, 166,
64, 52,
64, 50,

64, 52,
62, 52,
64, 52,
60, 170,
60, 170,
64, 166,
62, 168,
64, 50,
64, 52,
62, 168,
60, 54,
62, 54,
60, 54,
62, 54,
60, 54,
62, 168,
62, 168,
62, 54,
60, 170,
60, 0};

settings:

470, 456,
66, 166,
62, 168,

64, 166,

64, 50,

64, 52,

64, 50,

64, 52,

64, 50,

62, 168,

64, 166,

62, 168,

64, 52,

60, 54,

62, 54,

60, 54,

62, 54,

60, 54,

72, 158,

62, 54,

60, 170,

60, 170,

60, 54,

62, 54,

60, 54,

62, 168,

62, 54,

60, 170,

60, 54,
62, 54,
60, 170,
62, 168,
60, 170,
60, 4812,
472, 456,
64, 166,
64, 166,
64, 166,
64, 52,
64, 50,
64, 52,
60, 54,
62, 54,
60, 170,
60, 170,
62, 168,
62, 52,
62, 54,
60, 54,
62, 54,
60, 54,
62, 54,
60, 170,

62, 52,
62, 168,
62, 168,
62, 54,
62, 52,
62, 54,
62, 168,
62, 52,
62, 168,
62, 54,
62, 52,
62, 170,
60, 170,
60, 168,
62, 0};

info::

470, 458,
62, 168,
64, 166,
64, 166,
64, 50,
64, 52,
64, 50,
64, 52,

62, 52,
64, 166,
64, 166,
64, 166,
64, 52,
62, 52,
64, 52,
60, 54,
62, 54,
60, 170,
60, 170,
62, 168,
62, 168,
62, 168,
62, 54,
60, 54,
62, 52,
62, 54,
62, 52,
62, 54,
62, 52,
62, 54,
60, 170,
60, 170,
62, 168,

62, 4812,
470, 456,
64, 166,
64, 166,
64, 168,
62, 52,
64, 52,
62, 52,
64, 50,
64, 52,
62, 168,
62, 168,
62, 168,
62, 54,
60, 54,
62, 54,
60, 54,
62, 52,
62, 168,
62, 170,
60, 170,
60, 170,
60, 170,
60, 54,
62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 168,

62, 170,

60, 170,

60, 0};

up arrow::

470, 456,

64, 166,

64, 166,

64, 168,

62, 52,

64, 50,

66, 50,

64, 50,

66, 50,

64, 166,

64, 166,

64, 166,

64, 52,

64, 50,

62, 54,

62, 52,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 54,

62, 168,

62, 168,

62, 54,

62, 168,

60, 170,

62, 168,

62, 168,

62, 168,

62, 54,

62, 52,

62, 168,

62, 4814,

470, 458,

62, 168,

64, 166,

64, 166,

64, 50,

64, 52,

64, 50,

64, 52,

60, 54,

62, 168,

64, 166,

64, 166,

62, 54,

62, 52,

62, 54,

62, 52,

62, 54,

62, 54,

60, 54,

62, 52,

62, 54,

62, 52,

62, 168,

62, 170,

60, 54,

62, 168,

62, 168,

62, 168,

62, 168,

62, 170,
60, 54,
62, 54,
60, 168,
62, 5109,
6, 0};

down arrow::

470, 458,
64, 166,
64, 166,
64, 166,
64, 50,
64, 52,
64, 50,
64, 52,
64, 50,
74, 156,
64, 166,
64, 166,
64, 52,
64, 50,
64, 52,
60, 54,
62, 54,

60, 170,

62, 52,

62, 54,

62, 52,

62, 54,

62, 168,

60, 170,

62, 54,

60, 54,

62, 168,

62, 168,

62, 168,

62, 168,

62, 54,

60, 54,

62, 168,

62, 4812,

470, 456,

64, 166,

66, 166,

62, 168,

64, 50,

74, 42,

62, 52,

64, 52,

62, 52,
64, 166,
64, 166,
62, 168,
64, 52,
60, 54,
62, 54,
60, 54,
62, 52,
62, 168,
62, 54,
62, 52,
62, 54,
60, 54,
62, 168,
62, 168,
62, 54,
62, 52,
62, 168,
62, 170,
60, 170,
60, 170,
60, 54,
62, 52,
62, 170,

60, 5002,

8, 1072,

8, 0};

left arrow::

470, 456,

64, 166,

64, 166,

64, 168,

62, 52,

64, 50,

64, 52,

64, 50,

64, 52,

64, 166,

64, 166,

64, 166,

64, 50,

62, 54,

62, 52,

62, 54,

62, 52,

62, 168,

62, 54,

60, 170,

62, 52,
62, 54,
62, 168,
62, 168,
62, 52,
62, 54,
62, 168,
62, 54,
60, 168,
62, 170,
60, 54,
62, 54,
60, 170,
60, 4812,
472, 456,
64, 166,
64, 166,
64, 166,
64, 52,
62, 52,
64, 52,
62, 52,
64, 52,
60, 170,
64, 166,

62, 168,
62, 52,
62, 54,
60, 54,
62, 54,
60, 54,
62, 168,
62, 54,
60, 170,
62, 52,
62, 54,
60, 170,
60, 170,
60, 54,
62, 54,
60, 170,
62, 52,
62, 168,
62, 168,
62, 54,
60, 54,
62, 168,
62, 0);

right arrow::

12, 4712,
482, 444,
64, 166,
64, 166,
64, 166,
64, 52,
64, 50,
64, 52,
62, 52,
62, 54,
62, 168,
64, 166,
60, 170,
62, 54,
60, 54,
62, 52,
62, 54,
62, 52,
62, 54,
62, 168,
60, 54,
62, 54,
60, 54,
62, 168,
62, 168,

62, 54,
62, 168,
62, 52,
62, 170,
60, 170,
60, 168,
62, 54,
62, 54,
60, 170,
60, 4812,
470, 458,
64, 166,
64, 166,
64, 166,
64, 50,
76, 40,
64, 50,
64, 52,
64, 50,
62, 168,
64, 168,
60, 168,
62, 54,
64, 50,
62, 54,

62, 52,
62, 54,
62, 54,
60, 170,
60, 54,
62, 54,
60, 54,
62, 168,
62, 168,
62, 54,
60, 170,
60, 54,
62, 168,
62, 168,
62, 168,
62, 54,
60, 54,
62, 168,
62, 0};

return::

10, 1547,
472, 456,
64, 166,
64, 166,

64, 166,

64, 52,

64, 50,

64, 52,

64, 50,

64, 52,

60, 170,

64, 166,

64, 166,

64, 50,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 170,

60, 170,

60, 54,

62, 168,

62, 54,

60, 170,

62, 168,

60, 170,

60, 54,
62, 54,
60, 170,
62, 52,
62, 168,
62, 4812,
470, 456,
64, 168,
62, 168,
62, 166,
66, 50,
64, 52,
64, 50,
64, 52,
64, 50,
64, 166,
62, 168,
62, 168,
64, 52,
62, 52,
62, 54,
62, 52,
62, 54,
60, 54,
62, 54,

60, 54,
62, 168,
62, 168,
62, 54,
62, 168,
62, 54,
60, 170,
60, 170,
60, 170,
62, 52,
62, 54,
62, 168,
60, 54,
62, 170,
60, 0};

exit::

470, 456,
64, 168,
62, 166,
66, 166,
64, 50,
64, 52,
74, 40,
64, 52,

62, 52,
62, 168,
62, 168,
62, 168,
62, 54,
62, 52,
62, 54,
60, 54,
62, 54,
60, 170,
62, 52,
62, 168,
62, 168,
62, 54,
60, 170,
62, 54,
60, 54,
62, 54,
60, 168,
62, 54,
72, 42,
62, 170,
60, 54,
62, 168,
62, 168,

62, 4812,
470, 458,
60, 170,
62, 168,
62, 168,
62, 52,
62, 54,
62, 52,
62, 54,
62, 52,
62, 168,
62, 168,
62, 170,
60, 54,
62, 54,
60, 54,
62, 54,
60, 54,
62, 168,
62, 52,
62, 170,
60, 170,
60, 54,
62, 168,
62, 54,

60, 54,
62, 54,
60, 170,
60, 54,
62, 54,
60, 170,
70, 44,
62, 168,
62, 168,
62, 2058,
4, 0};

]

A::

470, 458,
62, 168,
64, 166,
64, 166,
74, 40,
64, 52,
64, 50,
64, 52,
62, 52,
64, 166,
64, 166,
64, 166,

64, 52,
64, 50,
62, 54,
62, 52,
62, 54,
60, 54,
62, 54,
60, 170,
60, 170,
62, 52,
62, 168,
62, 168,
62, 54,
60, 170,
62, 168,
62, 52,
62, 54,
62, 168,
60, 54,
62, 54,
60, 170,
62, 4812,
470, 458,
62, 166,
66, 166,

64, 166,

74, 40,

64, 52,

74, 40,

64, 52,

62, 52,

64, 166,

62, 168,

64, 166,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 54,

62, 52,

62, 170,

60, 170,

60, 54,

62, 168,

62, 168,

62, 54,

62, 168,

62, 168,

62, 54,

60, 54,
62, 168,
62, 54,
60, 54,
62, 168,
62, 0};

B::

470, 458,
62, 168,
62, 168,
62, 168,
62, 54,
62, 54,
60, 54,
62, 54,
60, 54,
62, 168,
62, 168,
62, 168,
62, 54,
60, 54,
62, 54,
60, 54,
62, 54,

60, 54,
62, 52,
62, 168,
62, 54,
62, 168,
62, 54,
60, 54,
62, 54,
60, 168,
62, 170,
60, 54,
62, 168,
62, 54,
60, 170,
60, 170,
60, 170,
62, 0};

C::

470, 456,
64, 166,
64, 166,
64, 168,
62, 52,
64, 52,

62, 52,

64, 50,

64, 52,

64, 166,

64, 166,

64, 166,

64, 52,

64, 50,

62, 52,

62, 54,

62, 52,

62, 170,

60, 54,

62, 168,

62, 54,

60, 170,

60, 54,

62, 54,

60, 54,

62, 54,

60, 170,

60, 54,

62, 168,

62, 54,

60, 170,

62, 168,

62, 168,

62, 0};

D::

462, 466,

54, 174,

56, 176,

56, 174,

56, 58,

56, 60,

54, 60,

56, 60,

54, 60,

56, 174,

56, 174,

56, 174,

58, 58,

56, 58,

56, 60,

56, 60,

54, 60,

56, 58,

56, 174,

56, 174,

58, 58,
56, 174,
56, 60,
54, 60,
56, 60,
54, 176,
56, 58,
56, 60,
56, 174,
54, 60,
56, 174,
56, 176,
54, 174,
56, 0};

e-mail::

470, 458,
62, 166,
66, 166,
64, 166,
64, 50,
64, 52,
74, 40,
62, 54,
64, 50,

62, 168,
62, 168,
64, 166,
62, 54,
60, 54,
62, 54,
60, 54,
62, 54,
62, 168,
62, 168,
62, 168,
62, 168,
62, 168,
62, 54,
62, 52,
62, 54,
60, 54,
62, 54,
60, 54,
62, 54,
60, 54,
62, 168,
62, 168,
62, 4812,

470, 456,

64, 166,

64, 166,

64, 168,

62, 52,

64, 50,

64, 52,

64, 50,

64, 52,

64, 166,

64, 166,

62, 168,

62, 54,

60, 54,

62, 52,

62, 54,

62, 52,

62, 170,

60, 170,

60, 170,

60, 170,

62, 168,

62, 168,

62, 52,

62, 54,

62, 52,
62, 54,
62, 52,
62, 54,
62, 52,
62, 54,
62, 168,
60, 170,
60, 657,
16, 3262,
8, 2417,
6, 0};

P-size::

14, 2018,
24, 4364,
26, 530,
24, 4092,
18, 5274,
8, 3992,
8, 1666,
10, 4490,
4, 1495,
470, 456,
62, 168,

62, 168,

62, 168,

62, 54,

62, 52,

62, 54,

60, 54,

62, 54,

60, 170,

62, 168,

62, 168,

62, 52,

62, 54,

62, 52,

62, 54,

60, 54,

62, 54,

60, 170,

62, 168,

62, 168,

62, 168,

62, 168,

62, 54,

60, 54,

62, 168,

62, 54,

60, 54,
62, 54,
60, 54,
62, 54,
58, 172,
58, 172,
58, 4814,
470, 458,
62, 168,
62, 168,
62, 168,
62, 54,
60, 54,
62, 54,
60, 54,
62, 54,
60, 168,
62, 170,
60, 170,
60, 54,
62, 54,
60, 54,
62, 54,
60, 54,
62, 52,

62, 168,
62, 170,
60, 170,
60, 170,
60, 170,
62, 52,
62, 54,
62, 168,
62, 52,
62, 54,
60, 54,
62, 54,
60, 54,
62, 168,
62, 168,
62, 5698,
8, 845,
4, 1012,
8, 508,
4, 0};

CC/VD::

462, 464,
56, 174,
56, 176,

54, 174,

56, 60,

56, 58,

56, 60,

56, 58,

56, 60,

56, 174,

56, 174,

56, 174,

56, 60,

56, 58,

56, 60,

54, 60,

56, 60,

54, 176,

54, 60,

56, 174,

56, 58,

58, 58,

56, 174,

56, 60,

54, 60,

56, 60,

54, 176,

54, 60,

56, 174,

56, 174,

56, 60,

54, 176,

56, 174,

56, 4816,

464, 464,

56, 174,

56, 174,

56, 174,

56, 60,

56, 58,

56, 60,

56, 58,

56, 60,

56, 174,

56, 174,

56, 174,

56, 58,

56, 60,

56, 58,

56, 60,

56, 58,

56, 174,

56, 60,

56, 174,
56, 58,
56, 60,
56, 174,
56, 58,
56, 60,
56, 58,
56, 174,
56, 60,
56, 174,
56, 174,
56, 58,
56, 174,
56, 174,
56, 6078,
6, 0};

stop::

472, 454,
66, 166,
62, 168,
64, 166,
64, 50,
64, 52,
64, 50,

64, 52,

64, 50,

64, 166,

64, 166,

64, 166,

64, 52,

64, 50,

64, 52,

64, 50,

64, 52,

60, 54,

62, 168,

62, 168,

62, 54,

60, 54,

62, 54,

60, 170,

62, 52,

62, 168,

62, 54,

60, 54,

62, 168,

62, 168,

62, 168,

62, 54,

60, 170,
60, 4812,
472, 456,
64, 166,
64, 166,
64, 166,
64, 50,
66, 50,
64, 50,
64, 52,
64, 50,
64, 166,
64, 166,
62, 168,
62, 54,
62, 52,
62, 54,
60, 54,
62, 54,
60, 54,
62, 168,
62, 168,
62, 54,
62, 52,
62, 54,

60, 170,
60, 54,
62, 170,
60, 54,
62, 52,
62, 168,
62, 168,
62, 170,
60, 54,
62, 168,
62, 0};

rewind::

468, 458,
62, 170,
72, 158,
60, 170,
60, 54,
62, 54,
62, 52,
62, 54,
62, 52,
62, 168,
62, 168,
62, 170,

60, 54,
62, 54,
60, 54,
62, 52,
62, 54,
62, 168,
62, 54,
60, 170,
60, 54,
62, 54,
60, 54,
62, 168,
62, 52,
62, 54,
60, 170,
58, 58,
58, 172,
58, 172,
58, 172,
60, 54,
60, 170,
60, 4814,
470, 458,
62, 168,
62, 168,

62, 168,

62, 54,

62, 52,

62, 54,

62, 52,

62, 54,

60, 170,

60, 170,

62, 168,

62, 52,

62, 54,

62, 52,

62, 54,

62, 52,

62, 170,

60, 54,

62, 168,

62, 52,

62, 54,

62, 52,

62, 170,

60, 54,

62, 54,

60, 170,

60, 54,

62, 168,

62, 168,

62, 168,

62, 54,

60, 170,

60, 0};

play::

470, 458,

62, 168,

62, 168,

62, 170,

60, 54,

62, 52,

62, 54,

62, 52,

62, 54,

62, 168,

60, 170,

62, 168,

62, 52,

62, 54,

62, 52,

62, 54,

62, 52,

62, 170,

60, 170,

60, 170,

60, 54,

62, 54,

60, 54,

62, 168,

62, 54,

60, 54,

58, 58,

58, 56,

58, 172,

60, 170,

60, 170,

60, 56,

58, 172,

58, 4814,

468, 460,

60, 170,

62, 168,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,
60, 170,
60, 168,
62, 170,
60, 54,
62, 54,
60, 54,
62, 54,
60, 54,
62, 168,
62, 168,
62, 168,
62, 54,
60, 54,
62, 54,
58, 172,
58, 56,
60, 56,
58, 56,
60, 54,
60, 172,
58, 172,
58, 172,
58, 56,
60, 170,

60, 6314,
14, 0};

pause::

468, 458,
62, 168,
62, 168,
62, 170,
60, 54,
62, 54,
60, 54,
62, 54,
60, 54,
62, 168,
62, 168,
62, 168,
62, 54,
60, 54,
62, 54,
60, 54,
62, 54,
60, 54,
62, 168,
62, 54,
60, 170,

60, 54,
60, 56,
58, 172,
58, 56,
60, 170,
60, 56,
58, 172,
58, 56,
60, 172,
58, 170,
60, 56,
58, 172,
60, 4814,
468, 458,
62, 168,
62, 170,
60, 170,
60, 54,
62, 52,
62, 54,
62, 52,
62, 54,
62, 168,
62, 168,
62, 168,

62, 54,
60, 54,
62, 54,
60, 54,
62, 54,
58, 56,
58, 172,
58, 58,
58, 172,
58, 56,
60, 56,
58, 172,
58, 56,
60, 170,
60, 56,
58, 172,
58, 56,
60, 170,
60, 170,
60, 56,
58, 172,
58, 0};

fastforward::

14, 438,

16, 350,
14, 1533,
472, 456,
64, 166,
64, 166,
74, 158,
60, 54,
62, 54,
60, 54,
62, 54,
60, 54,
62, 168,
62, 168,
62, 168,
62, 54,
60, 54,
62, 54,
60, 54,
62, 52,
62, 54,
62, 52,
62, 54,
62, 168,
62, 54,
60, 54,

62, 168,

62, 52,

62, 170,

60, 170,

62, 168,

60, 54,

62, 170,

60, 168,

62, 54,

62, 168,

62, 4812,

468, 460,

62, 168,

62, 168,

62, 168,

62, 54,

62, 52,

62, 54,

62, 52,

62, 54,

62, 168,

60, 170,

62, 168,

62, 52,

62, 54,

62, 52,
62, 54,
62, 52,
62, 54,
60, 54,
62, 54,
60, 170,
62, 54,
60, 54,
62, 168,
62, 52,
62, 170,
60, 170,
60, 170,
60, 54,
62, 168,
62, 168,
62, 54,
60, 170,
60, 0};

enter::

12, 494,
462, 464,
56, 174,

56, 174,

56, 174,

56, 60,

56, 58,

56, 60,

56, 58,

56, 60,

56, 174,

56, 174,

56, 174,

56, 58,

56, 60,

56, 58,

56, 60,

56, 58,

56, 60,

56, 58,

56, 60,

56, 174,

56, 58,

56, 174,

56, 174,

56, 60,

56, 174,

56, 174,

56, 174,

56, 58,

56, 174,

56, 60,

56, 58,

60, 172,

58, 4814,

470, 458,

62, 168,

62, 168,

62, 168,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 168,

62, 170,

62, 168,

60, 54,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 54,

62, 54,

60, 170,

60, 54,

62, 168,

62, 168,

62, 54,

60, 170,

62, 168,

60, 170,

62, 54,

60, 170,

60, 54,

62, 52,

62, 168,

62, 0};