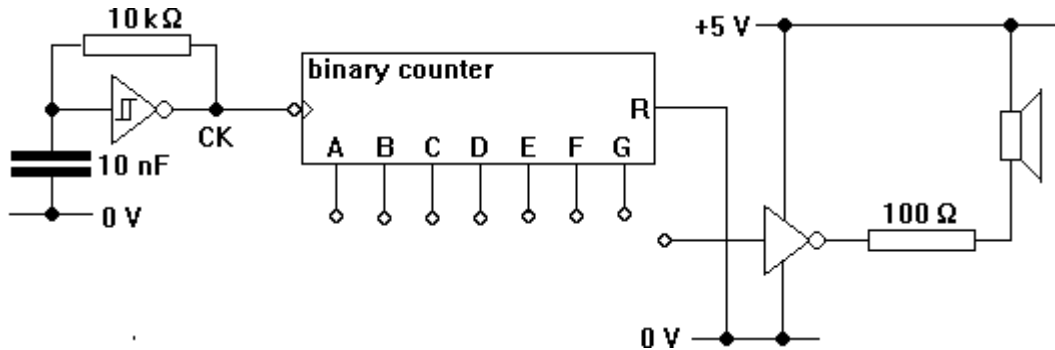


## Frequency reduction

1. Assemble the oscillator in the circuit shown. Use a CRO to verify that CK has a frequency of approximately 20 kHz.



2. Add a 4024 seven-bit counter i.c. and a 2004 driver. Connect a speaker and a 100 Ω current-limiting resistor to the output of the driver.
3. Use the CRO to monitor the input to the driver. Connect the driver to each output of the counter in turn. Measure the period of the waveform entering the driver each time.
4. What is the pattern in your results?