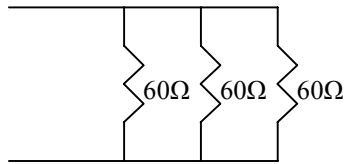


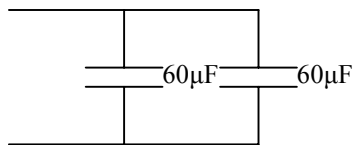
## Quiz 4

1. Draw the program flowchart shapes that correspond to the following program operations.
  - a) action
  - b) decision
  - c) start/end
2. Draw the circuit diagram symbols for the following electrical components.
  - a) capacitor
  - b) resistor
  - c) battery/power supply
  - d) inductor
  - e) single pole/single throw switch

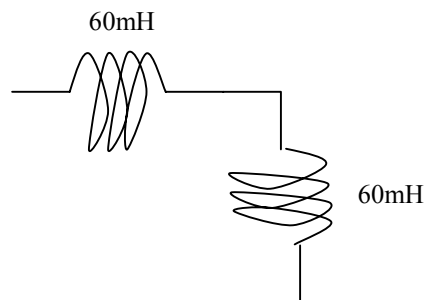
3. Determine the equivalent (total) resistance of the following set of resistors.



4. Determine the equivalent (total) capacitance of the following set of capacitors.



5. Determine the equivalent (total) inductance of the following set of inductors.



6. What is the difference between a microprocessor and a microcontroller?

7. Draw the flowchart of a program that adds up all numbers between 1 and 100.

8. What are the units of power?

9. Given the voltage  $V$  and current  $I$  for an electrical component, what is the component's power consumption?

