

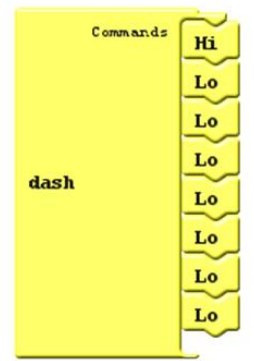
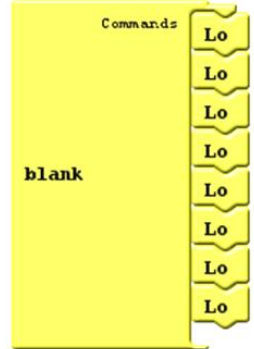
Do the "setup" to reflect the pin configuration above.

Turn "Shift Register 1" into a subroutine called "readPot" as shown on the following page.

Create new subroutines called "blank" and "dash".

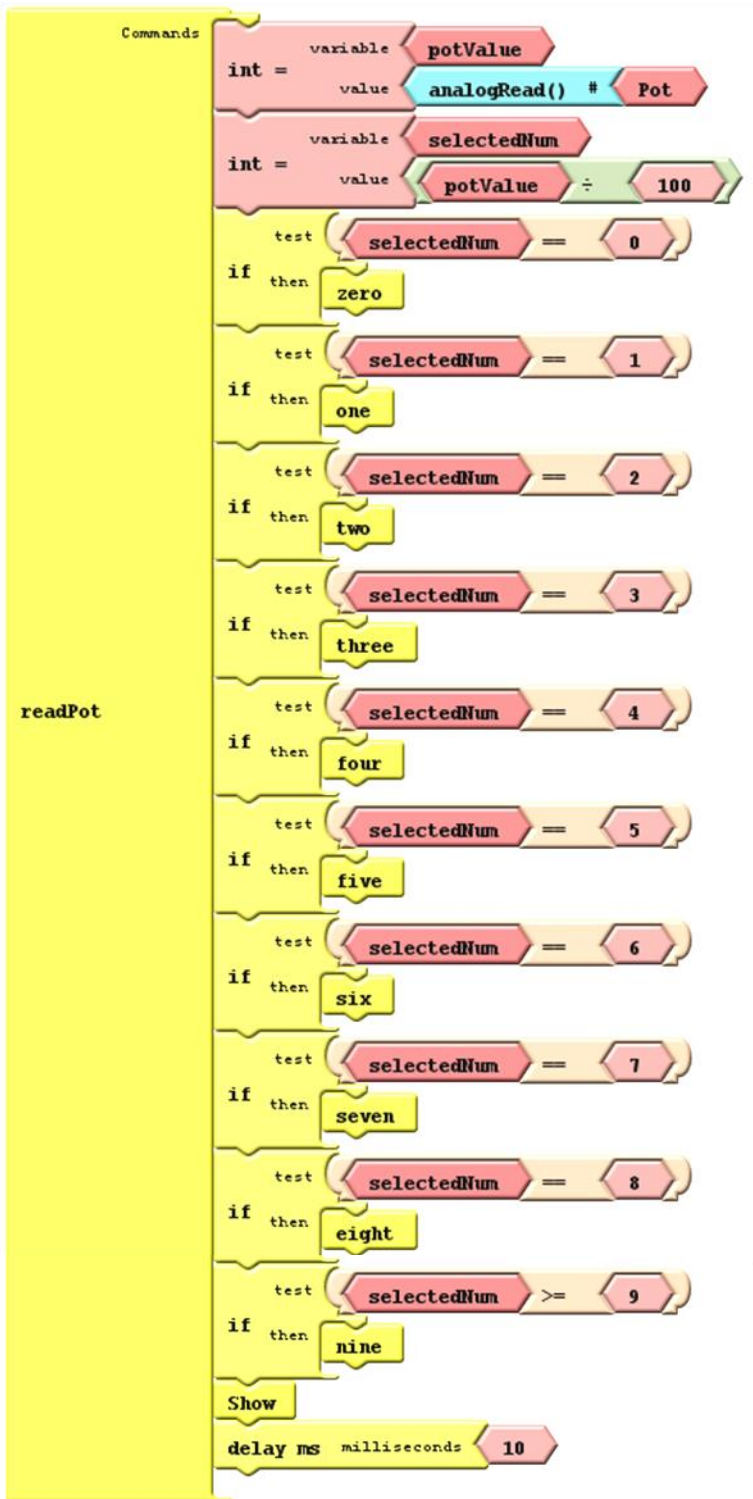
```

loop
  blank
  Show
  digitalWrite() # Locked HIGH
  digitalWrite() # Open LOW
  test digitalRead() # Button == LOW
  while Commands delay ms milliseconds 10
  delay ms milliseconds 500
  test digitalRead() # Button == LOW
  while Commands readPot
  delay ms milliseconds 10
  dash
  Show
  int = variable digit1 value selectedNum
  delay ms milliseconds 500
  test digitalRead() # Button == LOW
  while Commands readPot
  delay ms milliseconds 10
  dash
  Show
  int = variable digit2 value selectedNum
  delay ms milliseconds 500
  if test digit1 == 2 and digit2 == 7
  then
    digitalWrite() # Locked LOW
    digitalWrite() # Open HIGH
    test digitalRead() # Button == LOW
    while Commands delay ms milliseconds 10
  delay ms milliseconds 500
  
```



The code is set by the Digit1 and Digit2 in the "if" test. (eg 2 and 7.)

Push the button to start. Turn dial to select number. Push the button when correct number displayed. If the "Code" is correct the unlock light will come on. Push the button to relock.



In the "if" statements include a "selectedNum" that reflects the number on the display. This will remain the same when the button is pushed and can be used to insert into digit 1 in the next step.

