

Assume we have a deck of special **cards**.

These special cards each have a **value** from 1 to 10 and a **symbol** (*boy* or *girl*).

So examples of these cards would be 9-boy, 7-girl, 4-girl, etc.

There are four **piles** of these cards: a **draw** pile, a **discard** pile, a **post** pile, and a **blitz** pile.

Here are the methods that can be used on **cards** and **piles**:

```
[card].value ⇒ returns a number between 1 and 10
[card].symbol ⇒ returns a string: either "boy" or "girl"
[card1].sameSymbol([card2]) ⇒ returns true if the symbols on [card1] and
[card2] are the same and false otherwise

[pile].draw ⇒ removes the top card from [pile] and returns it
[pile].top ⇒ returns the top card on [pile] (doesn't remove it)
[pile].place([card]) ⇒ places [card] on top of [pile]
[pile].empty ⇒ returns true if [pile] is empty and false otherwise
```

Let's assume we start with a draw pile of many cards called **drawPile**, an empty discard pile called **discardPile**, an empty post pile called **postPile**, and an empty blitz pile called **blitzPile**. Here is an algorithm that is followed every time a card is drawn from drawPile:

```
drawnCard := drawPile.draw

if (drawnCard.value = 1 AND blitzPile.empty) then
  blitzPile.place(drawnCard)
else if (postPile.empty) then
  postPile.place(drawnCard)
else if (drawnCard.value - blitzPile.top.value = 1) then
  blitzPile.place(drawnCard)
else if (drawnCard.value - postPile.top.value = -1 AND
!drawnCard.sameSymbol(postPile.top)) then
  postPile.place(drawnCard)
else
  discardPile.place(drawnCard)
end if
```

Using the above algorithm, show how the blitz, post, and discard piles look if these are the top 6 cards in the draw pile: **3-boy, 1-girl, 3-girl, 2-boy, 10-girl, 2-girl** (3-boy is the first card drawn, 1-girl the second, etc.)

Use the following table to show what is in each pile. The *bottom row* in the table represents the *bottom card* in the given pile. (So for examplePile, 8-boy is on the bottom and 2-girl on the top.)

examplePile	blitzPile	postPile	discardPile
2-girl			
3-boy			
8-boy			