

## Queue of Circles

Remember that you have already created a Circle class (it was B2 last unit). This program will make a Queue of your Circle objects.

Adapt the Queue class so that it holds a queue of circles. Rename the class **QueueCircle**.

Then, in the MainActivity, create a button that runs your queue class. It should:

- Enqueues 5 circles to the queue.
- Prints the size of the queue (with a sentence)
- Has a loop to dequeue each circle, printing it as it goes.

```
public class QueueCircle {
    private Object data[] = new Object [50];
    int count;
    int head;

    public QueueCircle () {
        count = 0;
        head = 0;
    }

    public void enqueue (Object value) {
        int tail = (head + count) % data.length;
        data [tail] = value;
        count++;
    }

    public Object dequeue () {
        Object temp = data [head];
        count--;
        head = (head + 1) % data.length;
        return temp;
    }

    public Object peek () {
        return data [head];
    }

    public int size () {
        return count;
    }

    public boolean isEmpty () {
        return (count == 0);
    }

    public String toString () {
        //this is NOT an official Queue method
        //it is useful to see what is in your Queue
        int size = count;
        String hold = "";
        for (int i = 0 ; i < size ; i++) {
            Object temp = dequeue ();
            hold += temp + " ";
            enqueue (temp);
        }
        return hold;
    }
}
```

