Assignment 3 MEMO

```java
public static void showAll(MyArrayList b[])
  {
     for (int i = 0; i<4; i++)
           System.out.println(b[i]);
  }

public static boolean checkWin(MyArrayList b[])
  {
     boolean win=true;
     for (int i = 0; i<4; i++)
      {
         if(!b[i].isAllGuessed())
          win=false;
      }
     return win;
  }

 public static void main(String args[])
  {
    Scanner in = new Scanner(System.in);
    Random ran = new Random();
    MyArrayList blocks[] = new MyArrayList[4];
    blocks[0] = new MyArrayList<Card>();
    blocks[1] = new MyArrayList<Card>();
    blocks[2] = new MyArrayList<Card>();
    blocks[3] = new MyArrayList<Card>();
    int r1,c1,r2,c2;
    for(int i=0;i<4;++i)
     {
       while(!blocks[i].isFull())
        {
         int val=ran.nextInt(8)+1;
         int count=0;
         for(int i2=0;i2<4;++i2)
         {
            count = count + blocks[i2].getCount(val);
            System.out.println("Value:" + val + " Count:" + count);
          }
          if(count<2)
             blocks[i].add(blocks[i].getSize(),new Card(val));
        }
     }
    showAll(blocks);
    while (!checkWin(blocks))
     {
       System.out.println("Enter first value row number: ");
       r1 = in.nextInt();
       System.out.println("Enter first value Column number: ");
       c1 = in.nextInt();
       if(r1>=0&&r1<4&&c1>=0&&c1<4)
       {
       Card hold = (Card)blocks[r1].get(c1);
       if(!hold.isGuessed())
        {
          hold.setGuessed(true);
          showAll(blocks);
          System.out.println("Enter second value row number: ");
          r2 = in.nextInt();
          System.out.println("Enter second value Column number: ");
          c2 = in.nextInt();
          if(r2>=0&&r2<4&&c2>=0&&c2<4)
          {
```

```java
        Card hold2 = (Card)blocks[r2].get(c2);
        if(!hold2.isGuessed())
        {
          hold2.setGuessed(true);
          showAll(blocks);
          if(((Card)blocks[r1].get(c1)).equals((Card)blocks[r2].get(c2)))
            System.out.println("Good Guess!! ");
          else
          {
            System.out.println("Oeps!! ");
            hold.setGuessed(false);
            hold2.setGuessed(false);
          }
        }else
        {
          System.out.println("Second value already guessed: ");
          hold.setGuessed(false);
        }
      }else System.out.println("Second values entered not valid! ");
      }else System.out.println("First value already guessed: ");
    }else System.out.println("First values entered not valid! ");
   }
   System.out.println("Winner!!!!!");
  }
}
```