

## AP COMPUTER SCIENCE A – JAGGED ARRAYS

**1) Type in and run the program JaggedArray.**

```

public class JaggedArray {
    /**/
    public static void main ( String [] arg ) {
        /**/
        System.out.println();
        /**
         *  declare a 1-dimensional array of 3 pointers, each pointer of which
         *  points to a 1-dimensional array of ints
         */
        int [][] jaggedA=new int [3][];
        /**
         *  print out the [][] pointer
         */
        System.out.println("    jaggedA = " + jaggedA);
        /**
         *  make the jagged array
         */
        jaggedA[0] = new int [] { 1 , 2 , 3 , 4 , 5 };
        jaggedA[1] = new int [] { 6 , 7 };
        jaggedA[2] = new int [] { 8 , 9 , 10 , 11 };
        /**
         *  print out the 3 [] pointers
         */
        System.out.println();
        for ( int i=0; i<jaggedA.length; ++i ) {
            System.out.println("jaggedA[" + i + "] = " + jaggedA[i]);
        }
        /**
         *  print out the jagged array
         */
        String outLine;
        System.out.println();
        for ( int i=0; i<jaggedA.length; ++i ) {
            outLine="";
            for ( int j=0; j<jaggedA[i].length; ++j ) {
                outLine += String.format("%4d",jaggedA[i][j]);
            }
            System.out.println(outLine);
        }
        /**/
        return;
    }
}

```

Show me the output of the program.

## AP COMPUTER SCIENCE A – JAGGED ARRAYS

- 2) Type in the program JaggedArray2, which prints out the same array as in problem 1, but by using class FileOutputStream.

```
public class JaggedArray2 {  
    /**/  
    public static void main ( String [] arg ) {  
        /**/  
        int [][] jaggedA;  
        FileOutputStream fo;  
        /**/  
        jaggedA=new int [3][];  
        jaggedA[0] = new int [] { 1 , 2 , 3 , 4 , 5 };  
        jaggedA[1] = new int [] { 6 , 7 };  
        jaggedA[2] = new int [] { 8 , 9 , 10 , 11 };  
        /*  
        *   print out the jagged array  
        */  
        System.out.println();  
        fo=new FileOutputStream();  
        for ( int i=0; i<jaggedA.length; ++i ) fo.println("%2d",jaggedA[i]);  
        fo.close();  
        /**/  
        return;  
    }  
}
```

Show me the output of the program.