

Free response questions from past AP-test:

A reminder

Subjects are usually one (or more) of:

1D array, 2D array, ArrayList, Multiple classes, Design a class: Inheritance, Design a class: Interface, Strings.

2017		
Q2 – Mult practice	Design and Build a class. Write complete class and implement interface. MultPRACTICE, getPROBLEM, nextPROBLEM	Creating problems for practice. The interface defined TWO functions to be implemented. Key word: implements
Q3 – Phrase	String. Modifying and manipulating String (phrase). FindNthOccurrence ReplaceNthOccurrence	Must use the 'Nth' occurrence function!!
Q4 – Position	2D array of values. findPosition getSuccessorArray	The successor array was an array of Objects (Position objects). Must use findPosition.

2016		
Q1 – Random String Choose	<p>ArrayList (from Array)</p> <p>Random number Write complete class and subclass constructor</p>	<p>In the subclass, use super(with arguments).</p> <p>ONE line solution to part b.</p>
Q2 – Log Messages	<p>String manipulation, ArrayList</p> <p>Log message. Parsing these.</p>	<p>Trick of adding spaces at the beginning/end of Strings!!</p> <p>“.. needs to be at the beginning or preceded by a space.”</p> <pre>return (" " + description + " ").indexOf(" " + keyword + " ") >= 0;</pre>
Q3 – CrossWord	<p>2D array (Booleans)</p> <p>toBeLabeled : One long Boolean line... return !blackSquares[r][c] && (r == 0 blackSquares[r-1][c] c == 0 blackSquares[r][c-1]);</p>	<p>2D array of objects: Square. Need to be initialized new Square().</p> <pre>if (toBeLabeled(r, c, blackSquares)){ puzzle[r][c] = new Square(false, num); num++; } else puzzle[r][c] = new Square(blackSquares[r][c], 0); }</pre>
Q4 – StringFormatter	<p>ArrayList, String manipulations, calculations (gaps etc).</p>	<p>A lot of CODE! Space before, after, and putting it together.</p>

2014		
Q3 – Seating Chart		
Q4 – Trio	Design a class: Interface	<ul style="list-style-type: none"> * Using Interface MenuItem to refer to all items. * Minimum price among three objects.

2013		
Q1 – Song list		* updateDownloads()
Q3 - Manga		
Q4 – Sky View		