

2018 A Exam Answers
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- 1 E – logic and conditionals
- 2 D – inheritance and overriding and what is *returned* – Student and GradStudent
- 3 B - 1-d arrays and prog fund
- 4 C - list processing
- 5 A - constructors and inheritance – Car and ElectricCar and constructors
- 6 E - oo concepts – passing parameters and subclasses
- 7 B – complex conditional, logic, and DeMorgans
- 8 A – selection sort with missing code
- 9 B – pick code that outputs values – nested for loops
- 10 A –nested loop and minimum number of times it will execute
- 11 D - OO concepts – which will compile – inheritance and compile-time type
- 12 C – 2D array – media comp inspired
- 13 D - tracing a while loop
- 14 B – recursion / and %
- 15 C – OO – inheritance hierarchy
- 16 A - insertion sort and tracing how it changes the array
- 17 C - binary, decimal, hex, octal, $123 - 10 = 113 + 5 = 118 + 13 = 131$
- 18 B – recursion with strings and substring
- 19 C – general for loop and prog fund
- 20 D – OO constructors
- 21 D - OO interfaces – is this still valid with Java 8?
- 22 A – pass by value and array reference and conditional
- 23 B - string, for loop, and substring
- 24 E - 2d array and nested loops
- 25 B - OO concepts var declarations and interfaces
- 26 D - nested loop counts of execution
- 27 E – binary search – tracing the result and returning the index of the target value
- 28 E – for loop and prog fund and tracing
- 29 A - recursion power of 3
- 30 C - OO concepts – super and which method is called on a child object
- 31 B - selection sort
- 32 E - loop may not execute and thus no return so code will not compile
- 33 A – strings and equals vs ==
- 34 C - strings and substrings
- 35 E – recursion and strings and substrings – with an error in the base case
- 36 E - OO – polymorphism
- 37 D – sorting
- 38 B – complex conditional
- 39 B – two-dimensional array and a loop
- 40 A - conditionals – prog fund

Java Visualizer URL to help you understand the answer

1. <https://goo.gl/pKD6jM>
2. <https://goo.gl/4HHzRX>
3. <https://goo.gl/PR6Vri>
4. <https://goo.gl/NEhcGV>
5. <https://goo.gl/47Ca4K>
6. <https://goo.gl/wEwh9L>
7. <https://goo.gl/38fEgt>
8. <https://goo.gl/vGzXqJ>
9. <https://goo.gl/8tdSaM>
10. <https://goo.gl/jMzXaQ>
11. <https://goo.gl/rQXibm>
12. <https://goo.gl/iJR8T9>
13. <https://goo.gl/bYDkYm>
14. <https://goo.gl/CcDsRk>
15. none
16. <https://goo.gl/jrvPfv>
17. none
18. <https://goo.gl/aNnhZY>
19. <https://goo.gl/uN6bJW>
20. <https://goo.gl/XcmjRW>
21. none
22. <https://goo.gl/UTsq3w>
23. <https://goo.gl/oVVpg8>
24. <https://goo.gl/a4UJVB>
25. <https://goo.gl/g3gR9Q>
26. <https://goo.gl/VzqZCE>
27. <https://goo.gl/SX5SsJ>
28. <https://goo.gl/SHbWH8>
29. <https://goo.gl/XKtBUL>
30. <https://goo.gl/nQ5s8X>
31. <https://goo.gl/6RjbCs>
32. <https://goo.gl/a1STmX>
33. <https://goo.gl/XrHY87>
34. <https://goo.gl/adjHGQ>
35. <https://goo.gl/RDHrVv>
36. <https://goo.gl/hWUWT6>
37. none
38. <https://goo.gl/1AvXRW>
39. <https://goo.gl/BAPvQ5>
40. <https://goo.gl/yyQ6Sx>