Java Questions & Answers – Character and Boolean Data Types

1. What is the numerical range of a char in Java?  
a) -128 to 127  
b) 0 to 256  
c) 0 to 32767  
d) 0 to 65535

**Answer:d**Explanation: Char occupies 16-bit in memory, so it supports 2^16 i:e from 0 to 65535.

2. Which of these coding types is used for data type characters in Java?  
a) ASCII  
b) ISO-LATIN-1  
c) UNICODE  
d) None of the mentioned  
**Answer:c**Explanation: Unicode defines fully international character set that can represent all the characters found in all human languages. Its range is from 0 to 65536.

3. Which of these values can a boolean variable contain?  
a) True & False  
b) 0 & 1  
c) Any integer value  
d) true

**Answer:a**Explanation: Boolean variable can contain only one of two possible values, true and false.

4. Which of these occupy first 0 to 127 in Unicode character set used for characters in Java?  
a) ASCII  
b) ISO-LATIN-1  
c) None of the mentioned  
d) ASCII and ISO-LATIN1

**Answer:d**Explanation: First 0 to 127 character set in Unicode are same as those of ISO-LAIN-1 and ASCII.

5. Which one is a valid declaration of a boolean?  
a) boolean b1 = 1;  
b) boolean b2 = ‘false’;  
c) boolean b3 = false;  
d) boolean b4 = ‘true’

**Answer:c**Explanation: Boolean can only be assigned true or false literals.

6. What is the output of this program?

1. **class** array\_output {
2. **public** **static** **void** main(String args[])
3. {
4. **char** array\_variable [] = **new** **char**[10];
5. **for** (**int** i = 0; i < 10; ++i) {
6. array\_variable[i] = 'i';
7. System.out.print(array\_variable[i] + "" );
8. i++;
9. }
10. }
11. }

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a) i i i i i  
b) 0 1 2 3 4  
c) i j k l m  
d) None of the mentioned

**Answer:a**Explanation:None.  
output:  
$ javac array\_output.java  
$ java array\_output  
i i i i i

7. What is the output of this program?

1. **class** mainclass {
2. **public** **static** **void** main(String args[])
3. {
4. **char** a = 'A';
5. a++;
6. System.out.print((**int**)a);
7. }
8. }

a) 66  
b) 67  
c) 65  
d) 64

**Answer:a**Explanation: ASCII value of ‘A’ is 65, on using ++ operator character value increments by one.  
output:  
$ javac mainclass.java  
$ java mainclass  
66

8. What is the output of this program?

1. **class** mainclass {
2. **public** **static** **void** main(String args[])
3. {
4. **boolean** var1 = **true**;
5. **boolean** var2 = **false**;
6. **if** (var1)
7. System.out.println(var1);
8. **else**
9. System.out.println(var2);
10. }
11. }

a) 0  
b) 1  
c) true  
d) false

**Answer:c**Explanation:None.  
output:  
$ javac mainclass.java  
$ java mainclass  
true

9. What is the output of this program?

1. **class** booloperators {
2. **public** **static** **void** main(String args[])
3. {
4. **boolean** var1 = **true**;
5. **boolean** var2 = **false**;
6. System.out.println((var2 & var2));
7. }
8. }

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a) 0  
b) 1  
c) true  
d) false

**Answer:d**Explanation: boolean ‘&’ operator always returns true or false. var1 is defined true and var2 is defined false hence their ‘&’ operator result is false.  
output:  
$ javac booloperators.java  
$ java booloperators  
false

10. What is the output of this program?

1. **class** asciicodes {
2. **public** **static** **void** main(String args[])
3. {
4. **char** var1 = 'A';
5. **char** var2 = 'a';
6. System.out.println((**int**)var1 + " " + (**int**)var2);
7. }
8. }

a) 162  
b) 65 97  
c) 67 95  
d) 66 98

**Answer:b**Explanation:ASCII code for ‘A’ is 65 and for ‘a’ is 97.  
output:  
$ javac asciicodes.java  
$ java asciicodes  
65 97