# JAVA SELF-TEST QUESTIONS – CHAPTER 1 – GETTING STARTED

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| **Question 1** | If the following statement were used in a Java program, it would cause something to be written to the screen. What would it cause to be written to the screen?  System.out.println("Java is not a drink."); | |
| **Answer java is not a drink.** | |  | |

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| **Question 2** | Give a statement or statements that can be used in a Java program to write the following to the screen:  I like Java.  You like tea. | |
| **Answer System.out.println (“I like Java”);**  **System.out.println(”You like tea”);** | |  | |

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| **Question 3** | Write a complete Java program that uses System.out.println to output the following to the screen when run:  Hello World! | |
| **Answer public class HelloWorld {**  **Public static void main (String [] args) {**  **Syttem.out.println(“Hello World!”);**  **}**  **}** | |  | |

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| **Question 4** | What is a compiler? | |
| **Answer A compiler is a translator that converts the high -level language to machine level language.** | |  | |

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| **Question 5** | What is a source program? | |
| **Answer The program which is inputed into a compiler is called a source program.** | |  | |

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| **Question 6** | What is an object program? | | |
| **Answer A program in which another program is translated by an assembler or compiler.** | |  |

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| **Question 7** | What do you call a program that runs Java byte-code instructions? | |
| **Answer JVM (Java Virtual Machine) is a program that runs java byte-code instructions.** | |  | |

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| **Question 8** | Suppose you define a class named NiceClass in a file. What name should the file have? | |
| **Answer NiceClass.java** | |  | |

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| **Question 9** | Suppose you compile the class NiceClass. What will be the name of the file with the resulting byte-code? | |
| **Answer NiceClass.class** | |  |

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| **Question 10** | Which of the following may be used as variable names in Java?  rate1, 1stPlayer, myprogram.java, long, TimeLimit, numberOfWindows | |
| **Answer rate1, long, TimeLimit,numberOfWindows** | |  | |

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| **Question 11** | Can a Java program have two different variables named number and Number |
| **Answer Yes** |  |

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| **Question 12** | Give the declaration for two variables called feet and inches . Both variables are of type int and both are to be initialized to zero in the declaration. | |
| **Answer int feet = 0;**  **int inches = 0;** | |  | |

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| **Question 13** | Give the declaration for two variables called count and distance. count is of type int and is initialized to zero. distance is of type double and is initialized to 1.5 . | |
| **Answer int count = 0;**  **double distance = 1.5;** | |  | |

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| **Question 14** | Write a Java assignment statement that will set the value of the variable distance to the value of the variable time multiplied by 80. All variables are of type int. | |
| **Answer int time;**  **int distance = time \* 80;** | |  | |

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| **Question 15** | Write a Java assignment statement that will set the value of the variable interest to the value of the variable balance multiplied by the value of the variable rate. The variables are of type double. | |
| **Answer double balance;**  **double rate;**  **double interest = balance \*rate;** | |  | |

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| **Question 16** | What is the output produced by the following lines of program code?  char a, b;  a = 'b';  System.out.println(a);  b = 'c';  System.out.println(b);  a = b;  System.out.println(a); |
| **Answer b**  **c**  **c** | | |  |

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| **Question 17** | Convert each of the following mathematical formulas to a Java expression: |
| **Answer int x;**  **Int y;**  **Int z;**  **Int con = 3 \* x;**  **Int const = 3 \*x + y;**  **float math = (x+y)/7;**  **float sun = (3\*x + y)/(z+2);** | | |  |

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| **Question 18** | What is the output of the following program lines?  double number = (1/3) \* 3;  System.out.println("(1/3) \* 3 is equal to " + number); | |
| **Answer (1/3) \* 3 is equal to 1** | |  |

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| **Question 19** | What is the output produced by the following lines of program code?  int quotient, remainder;  quotient = 7 / 3;  remainder = 7 % 3;  System.out.println("quotient = " + quotient);  System.out.println("remainder = " + remainder); | |
| **Answer quotient = 2**  **remainder =0** | |  |

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| **Question 20** | What is the output produced by the following code?  int result = 11;  result /= 2;  System.out.println("result is " + result); | |
| **Answer result is 5** | |  |

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| **Question 21** | Given the following fragment that purports to convert from degrees Celsius to degrees Fahrenheit, answer the following questions:  double celsius = 20;  double fahrenheit;  fahrenheit = (9 / 5) \* celsius + 32.0;  a. What value is assigned to fahrenheit ?  b. Explain what is actually happening, and what the programmer likely wanted.  c. Rewrite the code as the programmer intended. | |
| **Answer a.The value 68 is assigned to fahrenheit.** | |  | |

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| **Question 22** | What is the output produced by the following lines of program code?  int n = ( int)3.9;  System.out.println("n == " + n); |
| **Answer n==3** |  |

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| **Question 23** | What is the output produced by the following lines of program code?  int n =3;  n++;  System.out.println("n == " + n);  n--;  System.out.println("n == " + n); |
| **Answer n==4**  **n==3** |  |

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| **Question 24** | What is the output produced by the following?  String verbPhrase = "is money";  System.out.println("Time" + verbPhrase); | | |
| **Answer Time is money** | |  |

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| **Question 25** | What is the output produced by the following?  String test = "abcdefg";  System.out.println(test.length());  System.out.println(test.charAt(1)); |
| **Answer 7**  **b** |  |

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| **Question 26** | What is the output produced by the following?  String test = "abcdefg";  System.out.println(test.substring(3)); |
| **Answer defg** |  |

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| **Question 27** | What is the output produced by the following?  System.out.println("abc\ndef"); | |
| **Answer abc**  **def** | |  |

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| **Question 28** | What is the output produced by the following?  System.out.println("abc\\ndef"); | |
| **Answer abc\ndef** | |  |

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| **Question 29** | What is the output produced by the following?  String test = "Hello Tony";  test = test.toUpperCase();  System.out.println(test); | |
| **Answer HELLO TONY** | |  |

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| **Question 30** | What is the output of the following two lines of Java code?  System.out.println("2 + 2 = " + (2 + 2));  System.out.println("2 + 2 = " + 2 + 2); | |
| **Answer 2+2 = 4**  **2+2 = 22** | |  | |

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| **Question 31** | Suppose sam is an object of a class named Person and suppose increaseAge is a method for the class Person that takes one argument that is an integer. How do you write an invocation of the method increaseAge using sam as the calling object and using the argument 10? The method increaseAge will change the data in sam so that it simulates sam aging by 10 years. | |
| **Answer sam.increaseAge(10);** | |  | |

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| **Question 32** | The following code is supposed to output the string in lowercase letters but it has an error. What is wrong?  String test = "WHY ARE YOU SHOUTING?";  test.toLowerCase();  System.out.println(test); |
| **Answer String is a permanent so using the method to LowerCase doesnot change the string test.**  **To change it we should set test equal to the string returned by toLowlerCase:**  **Test = test.toLowerCase;** | | |  |

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| **Question 33** | What are the two kinds of comments in Java? | |
| **Answer 1. Single line comment=//**  **2. Multi -line comment= /\* \*/** | |  | |

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| **Question 34** | What is the output produced by the following Java code?  /\*\*  *Code for Exercise.*  \*/  System.out.println("Hello");  *//System.out.print("Mr. or Ms. ");*  System.out.println("Student"); | |
| **Answer Hello**  **Student** | |  |

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| **Question 35** | What is the normal spelling convention for named constants? | |
| **Answer First letter for each word is capitalized, each word separated with in underscore.** | |  | |

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| **Question 36** | Write a line of Java code that will give the name ANSWER to the int value 42.  In other words, make ANSWER a named constant for 42. | |
| **Answer public static final ANSWER=42;** | |  | |