# 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) {   System.out.println("Hello World!"); |

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| **Question 4** | What is a compiler? |
| **Answer** | Compailer is a program that returns a high level language to machine understandable language , sorce code to Object code while whole code at a time. |

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| **Question 5** | What is a source program? |
| **Answer** | It is the program written by programmer in high level language . |

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| **Question 6** | What is an object program? |
| **Answer** | a program into 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** | Java Interpreter is the program that run the Java byte 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** | 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 intrest;  double balance;  double rate;  double = intrest \* 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** | 3 \* x  3 \* x + y  (x + y) / 7  (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 = 1 |

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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 = 5.5 |

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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** | fahrenheit = 68  programmer is trying to calcualte fahrenheit by using (celsius = 20) and suing formula fahreheit = (9 / 5) \* celsius + 32.0;  public class HelloWorld {   public static void main(Stringt[] args) {   double celsius = 20;  double fahrenheit;  fahrenheit = (9 / 5) \* celsius + 32.0;  System.out.println("Fahrenhei");   }  } |
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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** | Person sam = new Person ( ) ;  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** | Why are you shouting |

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| **Question 33** | What are the two kinds of comments in Java? |
| **Answer** | Single line comment  Block 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** | Will all uppercase latter. |

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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** | final int ANSWER = 42; |