Java Fundamentals Exam quiz

61 out of 61 correct

1. JDK stands for ____.

- [x] Java development kit
- [ ] Java deployment kit
- [ ] JavaScript deployment kit
- [ ] None of these

Explanation: JDK stands for Java Development Kit. It is a platform to develop and run Java applications.

2. JRE stands for ___.

- [ ] Java run ecosystem
- [ ] JDK runtime Environment
- [x] Java Runtime Environment
- [ ] None of these

Explanation: JRE stands for Java Runtime Environment which provides an environment to run a java program.

3. What makes the Java platform independent?

- [ ] Advanced programming language
- [x] It uses bytecode for execution
- [ ] Class compilation

- ◯ All of these

Explanation: In Java, programs are compiled into bytecode and that bytecode is platform-independent.

4. Can we keep a different name for the java class name and java file name?

- ◉ Yes
- ◯ No

Explanation: Yes, we can keep different names for java filename and java class name if and only if the class is not public.

5. What are the types of memory allocated in memory in java?

- ◯ Heap memory
- ◯ Stack memory
- ◉ Both A and B
- ◯ None of these

Explanation: Memory allocation in java occurs in two ways, mainly, stack and heap space.

6. Multiline comment is created using ___.

- ◯ //
- ◉ /* */
- ◯
- ◯ All of these

Explanation: Multi-line comments start with /* and ends with */. Any text between /* and */ will be ignored by Java.

7. What is the entry point of a program in Java?

- ◉ main() method

- ◯ The first line of code
- ◯ Last line of code
- ◯ main class

Explanation: Generally, the main() method is treated as the point where the flow of code starts.

8. Can we write a program without a main method in Java?

- ◉ Yes
- ◯ No

Explanation: Yes, we can write a java program without the main() method but there is a condition if and only if java JDK version till JDK 5.

9. Can the main() method be overloaded in Java?

- ◉ Yes
- ◯ No

Explanation: Yes, We can overload the main method in java but JVM only calls the original main method, it will never call our overloaded main method.

10. Which class in Java is used to take input from the user?

- ◉ Scanner
- ◯ Input
- ◯ Applier
- ◯ None of these

Explanation: The Scanner class is used to get user input, and it is found in the java. util package.

11. Method used to take a string as input in Java?

- ◯ next()

- [x] nextLine()
- [ ] Both A. and B.
- [ ] None of these

Explanation: The next() method can read the input only till the space. It can't read two words separated by space, while the nextLine() reads input including space between the words (that is, it reads till the end of line \n).

12. Which of the following is the correct syntax to create a variable in Java?

- [ ] var name;
- [x] int name;
- [ ] var name int;
- [ ] All of these

13. Is string mutable in Java?

- [ ] Yes
- [x] No

Explanation: String in Java is immutable i.e., once defined the value cannot be changed.

14. Which of these is a type of variable in Java?

- [ ] Instance Variable
- [ ] Local Variable
- [ ] Static Variable
- [x] All of these

Explanation: There are three types of variables in Java: Instance variable Local variable Class/Static variable

15. What will be the output of the following Java code?

```
public class Main {
  public static void main(String[] args) {
   String str = "Hello";
    str = "Bye";
   System.out.println(str);
  }
}
```

- ◯ Hello
- ◉ Bye
- ◯ Error
- ◯ All of these

16. What is type casting in Java?

- ◉ It is converting type of a variable from one type to another
- ◯ Casting variable to the class
- ◯ Creating a new variable
- ◯ All of these

Explanation: Type casting is when you assign a value of one primitive data type to another type.

17. The break statement in Java is used to ___.

- ◉ Terminates from the loop immediately
- ◯ Terminates from the program immediately
- ◯ Skips the current iteration
- ◯ All of these

Explanation: The break statement in Java is used to terminate from the loop immediately.

18. What will be the output of the following Java code?

```
public class Main {
 public static void main(String arg[]) {
   int i;
   for (i = 1; i <= 12; i += 2) {
     if (i == 8) {
      System.out.println(i);
     break;
     }
   }
  }
}
```

- ○ 1
- ◉ No output
- ○ 8
- ○ 1357911

Explanation: The condition (i == 8) could not be satisfied hence nothing cannot be printed.

19. Array in java is ___.

- ◉ Collection of similar elements
- ○ Collection of elements of different types
- ○ The data type of consisting of characters
- ○ None of these

Explanation: Array is a collection of similar elements.

20. Which of these is the correct method to create an array in java?

- ○ int[] arr = {1, 3, 5};
- ○ int[] arr;
- ○ arr = new int[] {3, 1, 8};
- ○ int arr[] = {1, 4, 6};
- ◉ All of these

21. Objects in java are ___.

- ○ Classes
- ◉ References
- ○ Iterators
- ○ None of these

Explanation: Objects in Java are Reference Variables.

22. What is garbage collection in java?

- ◉ Method to manage memory in java
- ○ Create new garbage values
- ○ Delete all values
- ○ All of these

Explanation: Garbage collection in Java is the process by which Java programs perform automatic memory management.

23. Static variables in java are declared as ___.

- ○ final variables
- ○ new variables

- (●) Constants
- ( ) All of these

Explanation: The static variables declarations just like constants, they required static keyword and an initial value.

24. 'this' keyword in java is ___.

- (●) Used to hold the reference of the current object
- ( ) Holds object value
- ( ) Used to create a new instance
- ( ) All of these

Explanation: Java this keyword is used to hold the reference of the current object.

25. What will be the output of the following Java code?

```
import java.util.Scanner;
class ThisKeyword {
   private int a = 4;
  private int b = 1;
void getSum(int a, int b) {
    this.a = a;
    this.b = b;
    System.out.println(this.a + this.b);
  }
}

public class Main {
  public static void main(String args[]) {
    ThisKeyword T = new ThisKeyword();
    T.getSum(3, 5);
  }
```

```
}
```

- ○ 5
- ○ 9
- ◉ 8
- ○ 4

Explanation: The above program is an example to demonstrate the use of this keyword.

26. The 'super' keyword is used to ___.

- ◉ Access instance of the parent class
- ○ Access instance of the same class
- ○ Access instance of child class
- ○ Access instance of friend class

Explanation: The super keyword refers to superclass (parent) objects. It is used to call superclass methods, and to access the superclass constructor.

27. The super() method is used to ___.

- ○ Call constructor of friend class
- ○ Is a declared method
- ◉ Call constructor of the parent class
- ○ Call constructor

Explanation: In Java programming language, the super() is a reference variable that is used to refer to parent class constructors. The super can be used to call parent class's variables and methods. The super() can be used to call parent class' constructors only.

28. What is stringBuffer in java?

- ○ Class to create a string array
- ◉ Class to create a mutable string in java
- ○ Class to create a string from i/o buffer
- ○ All of these

Explanation: StringBuffer class is used to create modifiable strings in java.

29. Which Java method is used to convert an object to string?

- ○ createString()
- ◉ toString()
- ○ object.string()
- ○ newString()

Explanation: Java method toString() is used to convert an object to string.

30. Which of these is a non-access modifier?

- ○ public
- ○ private
- ◉ native
- ○ All of these

Explanation: The native is a non-access modifier in Java.

31. Which of the following methods is used to extract the length of a string in Java?

- ◉ length()
- ○ len()
- ○ sizeof()

- ◯ size()

Explanation: The Java method length() is used to extract the length of a string in Java.

32. The trim() method in Java used to ___.

- ◯ Remove the given character
- ◯ Remove the values after the given index
- ◉ Remove leading and trailing spaces
- ◯ None of these

Explanation: The Java method trim() is a built-in function that eliminates leading and trailing spaces.

33. What will be the output of the following code?

```
public class ConcatNull {
  public static void main(String[] args) {
    String str1 = "include";
    String str2 = "help";
     System.out.println(str1 + str2);
  }
}
```

- ◉ includehelp
- ◯ include
- ◯ help
- ◯ None of these

Explanation: In the above code, the "+" operator is concatenating both of the strings.

34. What will be the output of the following Java code?

```
int arr[] = new int [5];
```

System.out.print(arr);

- ◯ 0
- ◯ value stored in arr[0]
- ◯ 00000
- ◉ Class name@ hashcode in hexadecimal form

Explanation: If we trying to print any reference variable internally, toString() will be called which is implemented to return the String in following form: classname@hashcode in hexadecimal form

35. Which of these operators is used to allocate memory to array variables in Java?

- ◯ malloc
- ◯ alloc
- ◉ new
- ◯ new malloc

Explanation: Operator new allocates a block of memory specified by the size of an array, and gives the reference of memory allocated to the array variable.

36. What will be the output of the following Java code?

```
class Demo
{
   public static void main(String args[]) {
   int arr[] = new int[] {0 , 1, 2, 3, 4, 5, 6, 7, 8, 9};
   int n = 6;
        n = arr[arr[n] / 2];
   System.out.println(arr[n] / 2);
     }
}
```

- ◯ 3

- ◯ 0
- ◯ 6
- ◉ 1

Explanation: Array arr contains 10 elements. n contains 6 thus in the next line n is given value 3 printing arr[3]/2 i:e 3/2 = 1 because of int Value, by int values there is no rest. If these values were to float the result would be 1.5. Output: $ javac Demo.java $ java Demo

37. What will be the output of the following Java code?

```
class Demo
{
   public static void main(String args[])
   {
      char array_variable [] = new char[10];
for (int i = 0; i < 10; ++i)
      {
         array_variable[i] = 'i';
          System.out.print(array_variable[i] + "");
      }
   }
}
```

- ◯ 1 2 3 4 5 6 7 8 9 10
- ◯ 0 1 2 3 4 5 6 7 8 9 10
- ◯ i j k l m n o p q r
- ◉ i i i i i i i i i i

Explanation: $ javac Demo.java $ java Demo i i i i i i i i i i

38. What will be the output of the following Java code?

```
class Test
{
```

```
public static void main(String args[])
{
  int array_variable[][] = {{ 1, 2, 3}, { 4 , 5, 6}, { 7, 8, 9}};
  int sum = 0;
  for (int i = 0; i < 3; ++i)
    for (int j = 0; j <  3 ; ++j)
      sum = sum + array_variable[i][j];
  System.out.print(sum / 5);
}
}
```

- ◯ 8
- ◉ 9
- ◯ 10
- ◯ 11

39. What will be the output of the following Java code?

```
class Increment {
  public static void main(String args[])
  {
    int g = 3;
    System.out.print(++g * 8);
  }
}
```

- ◉ 32
- ◯ 33
- ◯ 24
- ◯ 25

Explanation: Operator ++ has more preference than *, thus g becomes 4 and when multiplied by 8 gives 32.

40. Which one of the following is not a Java feature?

- ◯ Object-oriented
- ◉ Use of pointers
- ◯ Portable
- ◯ Dynamic and Extensible

Explanation: Pointers is not a Java feature. Java provides an efficient abstraction layer for developing without using a pointer in Java. Features of Java Programming are Portable, Architectural Neutral, Object-Oriented, Robust, Secure, Dynamic and Extensible, etc.

41. Which of these cannot be used for a variable name in Java?

- ◯ identifier & keyword
- ◯ identifier
- ◉ keyword
- ◯ none of the mentioned

Explanation: Keywords are specially reserved words that can not be used for naming a user-defined variable, for example: class, int, for, etc.

42. What is the extension of compiled java classes?

- ◯ .txt
- ◯ .js
- ◉ .class
- ◯ .java

Explanation: The compiled java files have .class extension.

43. Which of these are selection statements in Java?

- ○ break
- ○ continue
- ○ for()
- ◉ if()

Explanation: Continue and break are jump statements, and for is a looping statement.

44. What will be the output of the following Java program?

```
class Test
{
   public static void main(String args[])
   {
     StringBuffer s1 = new StringBuffer("Quiz");
     StringBuffer s2 = s1.reverse();
     System.out.println(s2);
   }
}
```

- ○ QuizziuQ
- ○ ziuQQuiz
- ○ Quiz
- ◉ ziuQ

Explanation: reverse() method reverses all characters. It returns the reversed object on which it was called. Output: $ javac Test.java $ java Test ziuQ

45. Number of primitive data types in Java are?

- ○ 6

- ○ 7
- ◉ 8
- ○ 9

Explanation: There are 8 types of primitive data types- int, char, boolean, byte, long, float, short, double.

46. Automatic type conversion is possible in which of the possible cases?

- ○ Byte to int
- ◉ Int to Long
- ○ Long to int
- ○ Short to int

47. Find the output of the following program.

```
public class Solution{
    public static void main(String[] args){
        short x = 10;
        x =  x * 5;
        System.out.print(x);
    }
}
```

- ○ 50
- ○ 10
- ◉ Compile Error
- ○ Exception

48. Find the value of A[1] after execution of the following program.

```
int[] A = {0,2,4,1,3};
for(int i = 0; i < a.length; i++){
```

```
    a[i] = a[(a[i] + 3) % a.length];
}
```

- ◯ 0
- ◉ 1
- ◯ 2
- ◯ 3

49. compareTo() returns

- ◯ True
- ◯ False
- ◉ An int value
- ◯ None

50. Identify the output of the following program.

```
String str = "abcde";
System.out.println(str.substring(1, 3));
```

- ◯ abc
- ◉ bc
- ◯ bcd
- ◯ cd

51. Identify the output of the following program.

```
String str = "Hellow";
System.out.println(str.indexOf('t));
```

- ◯ 0

- ◯ 1
- ◯ true
- ◉ -1

52. Identify the output of the following program.

```
public class Test{
        public static void main(String args[]){
                String str1 = “one”;
                String str2 = “two”;
                System.out.println(str1.concat(str2));
        }
}
```

- ◯ one
- ◯ two
- ◉ onetwo
- ◯ twoone

53. Find the output of the following code.

```
int ++a = 100;
System.out.println(++a);
```

- ◯ 101
- ◉ Compile error as ++a is not valid identifier
- ◯ 100
- ◯ None

54. Identify the return type of a method that does not return any value.

- ◯ int
- ◉ void
- ◯ double
- ◯ None

55. Where does the system store parameters and local variables whenever a method is invoked?

- ◯ Heap
- ◉ Stack
- ◯ Array
- ◯ Tree

Explanation: The system stores parameters and local variables in a stack.

56. Identify the modifier which cannot be used for constructor.

- ◯ public
- ◯ protected
- ◯ private
- ◉ static

Explanation: Static cannot be used for constructor.

57. What are the variables declared in a class for the use of all methods of the class called?

- ◯ Object
- ◉ Instance variables
- ◯ Reference variables

- ◯ None

Explanation: It is known as an instance variable.

58. What is the implicit return type of constructor?

- ◯ No return type
- ◉ A class object in which it is defined
- ◯ void
- ◯ None

Explanation: Implicit return type of constructor is the class object in which it is defined.

59. Identify the infinite loop.

- ◯ for(;;)
- ◯ for(int i=0;i<1;i--)
- ◯ for(int i=0;;i++)
- ◉ all of the above

Explanation: All of the above are infinite loop.

60. What would be the behaviour if this() and super() were used in a method?

- ◯ Runtime error
- ◯ throws exception
- ◉ compile time error
- ◯ Runs successfully

Explanation: this() and super() cannot be used in a method. This throws a compile time error.

61. What is false about constructor?

- ◯ Constructors cannot be synchronized in Java
- ◯ Java does not provide default copy constructor
- ◉ Constructor can have a return type
- ◯ “this” and “super” can be used in a constructor

Explanation: The constructor cannot have a return type. It should create and return new objects. Hence it would give a compilation error.

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