**FUNDAMENTALS OF JAVA**

1. What is Java?
2. A type of coffee
3. A programming language
4. An island in Indonesia
5. All of the above
6. Which of the following is true about Java?
7. It is a low-level language
8. It is a purely procedural language
9. It is platform-dependent
10. It is an object-oriented language
11. Which of the following is NOT a primitive data type in Java?
12. int
13. float
14. char
15. String
16. What is the entry point for the execution of a Java program?
17. start()
18. main()
19. execute()
20. run()
21. How is memory allocated in Java for objects?
22. Using malloc()
23. Using new keyword
24. Automatically by the garbage collector
25. Using allocateMemory() method
26. What is the keyword used for inheritance in Java?
27. inherit
28. extends
29. derive
30. include
31. What is the purpose of the 'static' keyword in Java?
32. To make a method static
33. To declare a variable as a class variable
34. To create static objects
35. Both a and b
36. What is the default value of an instance variable in Java if it is not initialized?
37. 0 (for numeric types)
38. null (for objects)
39. false (for boolean)
40. All of the above
41. What is the purpose of the 'super' keyword in Java?
42. To call the superclass constructor
43. To refer to the immediate parent class object
44. To invoke a static method
45. Both a and b
46. Which method is called when an object is about to be garbage collected?
47. destroy()
48. finalize()
49. dispose()
50. clean()
51. What is the difference between '== ' and 'equals()' in Java?
52. They are the same
53. '==' compares object references, while 'equals()' compares object content
54. '==' compares object content, while 'equals()' compares object references
55. '==' is used for primitive data types, and 'equals()' is used for objects
56. Which of the following is a feature of Java?
57. Pointers
58. Multiple Inheritance
59. Memory Management by Programmer
60. Both A and B
61. What is the main purpose of the 'public static void main(String[] args)' method in Java?
62. To declare variables
63. To initialize the program
64. Entry point of the program
65. To print output to the console
66. How is Java platform-independent?
67. Java uses a universal syntax
68. Java programs are translated into machine code
69. Java uses a bytecode that can be executed on any platform
70. Java doesn't run on any platform
71. Which keyword is used to declare a constant in Java?
72. constant
73. final
74. static
75. const
76. What is the correct way to create an object of a class in Java?
77. Object obj = new Object();
78. new Object obj = Object();
79. Object obj = createObject();
80. createObject(obj);
81. What is the purpose of the 'break' statement in Java?
82. To exit the program
83. To terminate a loop prematurely
84. To skip the current iteration in a loop
85. To print output to the console
86. How is memory managed in Java?
87. Manual memory allocation and deallocation
88. Garbage Collection
89. Stack-based memory management
90. Pointers
91. What is the purpose of the "this" keyword in Java?
92. To refer to the current instance of the class
93. To create a new object
94. To call a method from another class
95. To initialize variables
96. In Java, how is memory allocated for objects?
97. Automatically by the compiler
98. Explicitly using the malloc function
99. Dynamically at runtime using the 'new' keyword
100. Statically at compile-time
101. What is the Java Virtual Machine (JVM)?
102. A physical machine where Java programs run
103. A compiler used for Java programs
104. A software-based machine that runs Java bytecode
105. A debugger tool for Java programs
106. What does the term "JavaBeans" refer to in Java?
107. Coffee beans from Java
108. Reusable software components in Java
109. The main method in Java
110. A type of loop in Java
111. Which collection class is synchronized in Java?
112. ArrayList
113. LinkedList
114. HashMap
115. Vector
116. What is a Java package?
117. A collection of classes and interfaces
118. A data type in Java
119. A loop in Java
120. A Java application
121. What is the primary purpose of using packages in Java?
122. To create graphical user interfaces
123. To organize and group related classes and interfaces
124. To handle exceptions in a program
125. To implement multi-threading
126. Which keyword is used to declare a package in Java?
127. package
128. import
129. class
130. extends
131. What is an exception in Java?
132. A runtime error
133. A syntax error
134. A logical error
135. A compile-time error
136. Which keyword is used to handle exceptions in Java?
137. try
138. catch
139. throw
140. throws
141. What is the purpose of the 'finally' block in Java exception handling?
142. To catch and handle exceptions
143. To throw an exception
144. To clean up resources
145. To declare checked exceptions
146. Which of the following statements is true about checked exceptions in Java?
147. They are subclasses of Error
148. They must be caught or declared
149. They are optional to catch or declare
150. They are thrown explicitly using the 'throw' keyword
151. What happens if an exception is thrown inside the 'try' block in Java?
152. The program continues execution after the 'try' block
153. The program terminates
154. The 'catch' block is executed
155. The 'finally' block is executed
156. Which of the following is NOT a type of exception in Java?
157. Checked exception
158. Unchecked exception
159. Runtime exception
160. Compile-time exception
161. What is the purpose of the 'throw' keyword in Java?
162. To declare a method that may throw an exception
163. To catch an exception and handle it
164. To create a new exception and throw it explicitly
165. To suppress exceptions
166. Which exception is thrown when an array index is out of bounds in Java?
167. ArrayIndexOutOfBoundsException
168. NullPointerException
169. IndexOutOfBoundsException
170. IllegalArgumentException
171. What is the default exception handling behavior in Java?
172. Terminate the program
173. Print a stack trace and continue
174. Print an error message and continue
175. Print a stack trace and terminate the program
176. Which of the following is a subclass of RuntimeException in Java?
177. IOException
178. ClassNotFoundException
179. NullPointerException
180. FileNotFoundException