

Certainly! Here are 20 multiple-choice questions (MCQs) on Java with options. Please note that the answers are provided at the end:

1. ****What is Java?****
 - A) A scripting language
 - B) An operating system
 - C) A programming language
 - D) A web browser
2. ****Which of the following is not a primitive data type in Java?****
 - A) int
 - B) char
 - C) float
 - D) array
3. ****What is the main purpose of the "static" keyword in Java?****
 - A) Defining constant variables
 - B) Creating objects of a class
 - C) Accessing class-level variables and methods
 - D) Enabling dynamic polymorphism
4. ****How do you declare a method in Java that can throw an exception?****
 - A) void myMethod()
 - B) void myMethod() throws Exception
 - C) throws Exception void myMethod()
 - D) throws Exception myMethod()
5. ****Which of the following statements is used to terminate the execution of a loop in Java?****
 - A) end
 - B) exit
 - C) break
 - D) stop
6. ****What is the purpose of the "this" keyword in Java?****
 - A) Referring to the current instance of the class
 - B) Creating a new object
 - C) Invoking a superclass method
 - D) Handling exceptions
7. ****Which Java keyword is used to define a constant value?****
 - A) static
 - B) const
 - C) final
 - D) constant

8. ****What is the difference between "==" and ".equals()" when comparing strings in Java?****
- A) They are interchangeable
 - B) "==" compares object references, and ".equals()" compares content
 - C) ".equals()" compares object references, and "==" compares content
 - D) Both always return true
9. ****Which of the following is the correct syntax for creating an array in Java?****
- A) `int array[] = new int[];`
 - B) `int[] array = new int();`
 - C) `int[] array = new int[5];`
 - D) `array[] = new int[5];`
10. ****What is the purpose of the "interface" in Java?****
- A) Defining a class
 - B) Implementing multiple inheritance
 - C) Declaring constants
 - D) Storing data
11. ****What is the use of the "super" keyword in Java?****
- A) Referring to the current instance of the class
 - B) Accessing class-level variables
 - C) Invoking a superclass method or constructor
 - D) Creating a new instance of a class
12. ****Which of the following is a valid declaration of a Java main method?****
- A) `public static void main(String[] args)`
 - B) `static void main(String args[])`
 - C) `public static void main()`
 - D) `void main(String[] args)`
13. ****What does the "break" statement do in Java?****
- A) Terminates the program
 - B) Terminates the loop or switch statement
 - C) Skips the current iteration of the loop
 - D) Throws an exception
14. ****What is the purpose of the "StringBuilder" class in Java?****
- A) Creating resizable arrays
 - B) Formatting text output
 - C) Modifying string content without creating new objects
 - D) Parsing XML documents
15. ****Which of the following is a correct way to define and initialize a variable in Java?****

- A) `int x = new int();`
- B) `int x;`
- C) `int x = 5;`
- D) `x = 5;`

16. ****What is the role of the "throws" clause in a method signature in Java?****

- A) Declaring the return type
- B) Indicating the method is abstract
- C) Specifying the exceptions that the method may throw
- D) Enabling method overloading

17. ****Which Java collection class is used to implement a dynamic array?****

- A) `ArrayList`
- B) `LinkedList`
- C) `HashMap`
- D) `HashSet`

18. ****What is the purpose of the "finalize" method in Java?****

- A) Cleaning up system resources before an object is garbage-collected
- B) Performing final calculations in a loop
- C) Defining the main method of a program
- D) Finalizing the execution of a program

19. ****What does the "try-with-resources" statement in Java do?****

- A) Declares a new variable
- B) Closes resources automatically after the try block
- C) Opens a new file
- D) Handles exceptions in a try block

20. ****Which of the following is not a valid access modifier in Java?****

- A) `public`
- B) `private`
- C) `protected`
- D) `global`

****Answers:****

1. C, 2. D, 3. C, 4. B, 5. C, 6. A, 7. C, 8. B, 9. C, 10. B, 11. C, 12. A, 13. B, 14. C, 15. C, 16. C, 17. A, 18. A, 19. B, 20. D