B.Hanumanthu KITS-ISTE60

Test your Knowledge without Keys

Let's check how much we have learnt so far!!

Points:30
Time:15 mins

1.What is the maximum value that can be stored in a byte data type in Java?
a) 127
b) 255
c) 32767
d) 2147483647

2.Which data type is used to represent a single Unicode character in Java?
a) char
b) int
c) String
d) byte

3.In Java, what is the default value for an uninitialized int variable?
a) 0
b) 1
c) -1
d) null

4.What is the result of the following code snippet?
double num = 10.5;
int result = (int) num;

a) 10.5
b) 11
c) 10
d) Compilation Error

5.Implicit type casting is also known as:
a) Widening
b) Narrowing
c) Expanding
d) Converting

6.What does JVM stand for?
a) Java Virtual Machine
b) Java Variable Manager

c) Just Virtual Memory

d) Java Verification Module

7.Which component of the JVM is responsible for converting bytecode into machine code?

a) Class Loader

b) Execution Engine

c) Just-In-Time (JIT) Compiler

d) Garbage Collector

8.In Java, how do you create an instance (object) of a class?

a) Using the new keyword

b) Using the class keyword

c) Using the this keyword

d) By casting a data type

10.What is the relationship between a class and an object in Java?

a) A class is an instance of an object.

b) An object is an instance of a class.

c) They are unrelated.

d) A class is a type of method.

11.Encapsulation, Inheritance, and Polymorphism are the three pillars of:

a) Procedural Programming

b) Object-Oriented Programming (OOP)

c) Functional Programming

d) Structured Programming

12.What is the concept of "inheritance" in OOP?

a) A class can inherit properties and behaviors from another class.

b) A class can have multiple constructors.

c) A class can be instantiated without a constructor.

d) Inheritance is not a concept in OOP.

13.Which Java keyword is used to implement conditional statements?

a) when

b) case

c) if

d) switch

14.What is the result of the following code snippet?

int x = 5;

int y = 10;

int result = (x > y) ? x : y;

a) 5

b) 10
c) true
d) false

15.Which loop is best suited for situations where you don't know in advance how many times the loop will execute?
a) for loop
b) while loop
c) do-while loop
d) switch loop

16.What is the purpose of the break statement in a loop?
a) To restart the loop
b) To exit the loop prematurely
c) To skip the current iteration
d) To create an infinite loop

17.What is the primary difference between a JDK and a JVM in Java?
a) JDK is the Java Development Kit used for development, while JVM is the Java Virtual Machine used for execution.
b) JDK and JVM are interchangeable terms with no real distinction.
c) JDK is the Java Virtual Machine used for execution, while JVM is the Java Development Kit used for development.
d) JDK is an older version of JVM.

18.What is a pointer in programming, and does Java support pointers?
a) A pointer is a data type in Java for storing memory addresses, and Java fully supports pointers.
b) A pointer is a reference handle to a memory location, and Java supports the usage of pointers.
c) A pointer is a data type in Java for referencing objects, and Java partially supports pointers.
d) A pointer is a reference handle to a memory location, and Java doesn't support the usage of pointers.

19.What is the base class of all classes in Java?
a) java.lang.Class
b) java.base.Object
c) java.util.BaseClass
d) java.lang.Object

20.Does Java support multiple inheritance?
a) Yes, Java supports multiple inheritance.
b) No, Java doesn't support multiple inheritance
c)Maybe

d)Not sure

21.Is Java a pure object-oriented language?
a) Yes, Java is a pure object-oriented language.
b) No, Java uses primitive data types and is not a pure object-oriented language.
c)Maybe
d)Not sure

22. Are arrays primitive data types in Java?
a) Yes, arrays are primitive data types.
b) No, in Java, arrays are objects.

23. What is the difference between Path and Classpath in Java?
a) Path and Classpath are both Java classes.
b) Path specifies where to find .class files, and Classpath specifies the location of executables.
c) Path and Classpath are interchangeable terms with no real distinction.
d) Path is used to define .class file locations, and Classpath specifies the location of executables.

24. What are local variables in Java?
a) Local variables are declared globally and accessible from anywhere in the code.
b) Local variables are uninitialized by default.
c) Local variables are declared within a block of code like methods and must be initialized before use.
d) Local variables are always initialized by the JVM.

25.What are instance variables in Java?
a) Variables that are defined within methods.
b) Variables that are declared within loops.
c) Variables defined at the class level.
d) Variables that are automatically initialized to zero.

26. How do you define a constant variable in Java?
a) By using the 'var' keyword.
b) By declaring it as 'final' and 'static'.
c) By declaring it as 'final' and 'private'.
d) By using the 'const' keyword.

27. Is it compulsory to declare a main() method in all Java classes?
a) Yes, every Java class must have a `main()` method.
b) No, it's not required in all Java classes; it should be defined only for Java applications.
c) Yes, but only for classes that use inheritance.
d) No, it's not required for any Java class.

28.What is the return type of the main() method in Java?
a) int
b) String
c) void
d) boolean

29.Why is the main() method declared as static in Java?
a) To indicate that the method is the entry point of the program.
b) To prevent other methods from calling it.
c) To allow multiple instances of the main method to run concurrently.
d) To improve performance when calling the method.

30. What is the argument of the main() method in Java?
a) The `main()` method does not accept any arguments.
b) An integer representing the return code of the program.
c) An array of `String` objects representing command-line arguments.
d) A single `String` argument.