



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

1. What are the types of data types in Java?

- a. Primitive Data types
- b. Non-primitive Data Types
- c. Both A & B
- d. Non-linear Data Types

Ans: c. Both A & B

Explanation: In Java, there are two main data types: primitive data types (such as int, float, char, etc.) and non-primitive data types (such as classes, arrays, and interfaces).

2. Which is not a primitive data type?

- a. boolean
- b. character
- c. arrays
- d. integer

Ans: c. Arrays

Explanation: Arrays are considered non-primitive data types because they are objects that can hold a fixed number of values of the same type.

3. Which are the non-primitive data types?

- a. Arrays
- b. Classes
- c. Interfaces
- d. All of the above

Ans: d. All of the above

Explanation: Non-primitive data types in Java include Arrays, Classes, and Interfaces, making the correct Ans d. All of the above.

IT Support and Development Training Programme

Creating Employable Engineers and Entrepreneurs



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

4. What is the default value of the boolean data type?

- a. true
- b. false
- c. '1'
- d. '0'

Ans: b. false

Explanation: When a boolean variable is declared but not initialized, it automatically defaults to false. This default value signifies a logical false condition.

5. What is the size of boolean datatype?

- a. 2 bytes
- b. 4 bytes
- c. 1 bit
- d. 2 bits

Ans: c. 1 bit

Explanation: The default size of the boolean data type in Java is 1 bit. This small size is sufficient because a boolean variable can only hold two possible values: true or false.

6. What is the default value of char?

- a. "
- b. '0000'
- c. '0'
- d. '\u0000'

Ans: d. '\u0000'

Explanation: In Java, the default value of the char data type is '\u0000' (Unicode value for null character). When a char variable is declared but not initialized, it automatically defaults to this value.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

7. What is the default size of char?

- a. 1 byte
- b. 2 bytes
- c. 4 bytes
- d. 8 bytes

Ans: b. 2 bytes

Explanation: The default size of the char data type in Java is 2 bytes, allowing it to store a single 16-bit Unicode character.

8. What is the default size of int?

- a. 1 byte
- b. 2 bytes
- c. 4 bytes
- d. 8 bytes

Ans: c. 4 bytes

Explanation: The default size of the int data type in Java is 4 bytes, which allows it to store integer values within a specific range.

9. What is the default size of long?

- a. 1 byte
- b. 2 bytes
- c. 4 bytes
- d. 8 bytes

Ans: d. 8 bytes

Explanation: This larger size compared to int allows long to store much larger integer values, ranging from -9,223,372,036,854,775,808 to 9,223,372,036,854,775,807

IT Support and Development Training Programme

Creating Employable Engineers and Entrepreneurs



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

10. What is the default size of float?

- a. 1 byte
- b. 2 bytes
- c. 4 bytes
- d. 8 bytes

Ans: c. 4 bytes

Explanation: The default size of the float data type in Java is 4 bytes, allowing it to store single-precision floating-point numbers with moderate precision.

11. What is the default size of double?

- a. 1 byte
- b. 2 bytes
- c. 4 bytes
- d. 8 bytes

Ans: d. 8 byte

Explanation: This larger size compared to float allows double to store double-precision floating-point numbers, providing greater precision for decimal values.

12. Which data type is used to store a single character in Java?

- a. char
- b. string
- c. letter
- d. ch

Ans: a. char

Explanation: The data type used to store a single character in Java is char, which represents a 16-bit Unicode character



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

13. In Java, which data type is used to represent true or false values?

- a. boolean
- b. bit
- c. logic
- d. binary

Ans: a. boolean

Explanation: In Java, the data type used to represent true or false values is a. boolean.

14. The smallest integer type is and its size is bits.

- a. short, 8
- b. byte, 8
- c. short, 16
- d. short, 16

Ans: b. byte, 8

Explanation: byte is a signed 8-bit integer type in Java, capable of storing values from -128 to 127.

15. Which of the following can be a valid value for a char data type?

- a. "A"
- b. 'A'
- c. 65
- d. Both b and c

Ans: d. Both b and c

Explanation: In Java, the *char* data type can represent a single character using single quotes like 'A' or an ASCII value like 65.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

16. Which data type value can an int variable not store?

- a. -32768
- b. 100000
- c. 2147483648
- d. -2147483648

Ans: c. 2147483648

Explanation: The int data type in Java has a range from -2147483648 to 2147483647.

17. Which of the following is not a primitive data type in Java?

- a. float
- b. void
- c. char
- d. short

Ans: b. void

Explanation: void is not a data type but a special keyword used to indicate that a method does not return a value. When a method is declared void, it means that the method performs some actions but does not produce a result that can be used elsewhere.

18. Which data type would be most suitable for storing the price of an item in a store?

- a. int
- b. double
- c. boolean
- d. char

Ans: b. double

Explanation: The double data type is most suitable for representing prices because it can handle decimal values.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

19. Which of the following is the smallest primitive data type in Java?

- a. short
- b. int
- c. byte
- d. long

Ans: c. byte

Explanation: In Java, the byte data type uses 8 bits and has the smallest size among the primitive data types.

20. Which of the following is the largest primitive data type in Java?

- a. byte
- b. short
- c. int
- d. double

Ans: d. double

Explanation: The double data type uses 64 bits (8 bytes) and is the largest among the primitive data types in Java, especially in terms of floating-point data types.

21. Select the valid statement.

- a. `char [] ch = new char (5)`
- b. `char [] ch = new char [5]`
- c. `char [] ch = new char ()`
- d. `char [] ch = new char []`

Ans: b. `char [] ch = new char [5]`

Explanation: The statement `char [] ch = new char [5]` is correct because it uses the proper syntax to declare and initialize an array of characters with a specified size in Java.

The syntax for declaring and creating an array variable in java is:

```
dataType [] arrayVar = new dataType[arraySize];
```

IT Support and Development Training Programme

Creating Employable Engineers and Entrepreneurs



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

22. Java is a

- a. weakly typed language
- b. strongly typed language
- c. moderate typed language
- d. None of these

Ans: b. strongly typed language

Explanation: Java is a strongly typed language because it requires explicit declarations of variables' data types and enforces strict type checking at both compile-time and runtime.

23. How many primitives data types are there in java?

- a. 6
- b. 7
- c. 8
- d. 9

Ans: c. 8

Explanation: There are 8 primitive data types in Java: byte, short, int, long, float, double, char, and boolean.

24. Which of these coding types is used for data type characters in java?

- a. ASCII
- b. ISO-LATIN-1
- c. UNICODE
- d. none of the above

Ans: c. UNICODE

Explanation: Java uses Unicode to handle characters because Unicode provides a standard encoding scheme that supports a vast array of characters used across different languages and symbols worldwide.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

25. Which Character data type cannot store the following value?

- a. Digit
- b. Letter
- c. Special Character
- d. String

Ans: d. String

Explanation: The character data type in Java (char) can store letters, digits, and special characters individually, but it cannot directly store a string of characters (multiple characters). Therefore, the correct Ans is d. String.

26. Which of these values can a boolean variable contain?

- a. true & false
- b. 0 & 1
- c. Any integer value.
- d. Both a & b

Ans: a. true & false

Explanation: A boolean variable in Java can only hold two values: true or false.

27. What is the default size of the boolean data type?

- a. 2 bytes
- b. 4 bytes
- c. 1 bit
- d. 2 bits

Ans: c. 1 bit

Explanation: Java optimizes memory usage for boolean values by allocating 1 bit of memory per boolean variable.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

28. Which of the following is a valid refer data type?

- a. int
- b. double
- c. float
- d. String

Ans: d. String

Explanation: String is not a valid Java primitive data type; it's a reference type used for storing sequences of characters, unlike int, double, and float which are primitive data types directly holding numerical values.

29. Is String a primitive data type in java?

- a. False
- b. True

Ans: a. False

Explanation: String is not a primitive data type in Java; it is a reference data type.

30. Which of the following is not an integer literal value type?

- a. Binary (0 and 1)
- b. Octal number system (0 to 7)
- c. Decimal number system (0 to 9)
- d. Boolean (true and false)

Ans: d. Boolean (true and false)

Explanation: Boolean values (true and false) are not considered integer literal value types.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

31. In java, float is to be more precise than double.

- a. True
- b. False

Ans: b. False

Explanation: In Java, double is more precise than float because double uses 64 bits to store floating-point numbers, providing more precision and a wider range of values compared to float, which uses 32 bits.

32. Which among the following is the right way to define a char variable in java?

- a. Char character="h"
- b. Char character='h'
- c. Char character=h
- d. Char character=""h""

Ans: b. Char character='h'

Explanation: In Java, double is more precise than float because double uses 64 bits to store floating-point numbers, providing more precision and a wider range of values compared to float, which uses 32 bits.

33. Which of the following is incorrect in java?

- a. Int stu-id=125
- b. Int stu_id=125
- c. Int student=125
- d. Int stuid=125

Ans: a. Int stu-id=125

Explanation: In Java, variable names cannot contain hyphens (-). Therefore, Int stu-id=125 is incorrect syntax.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

34. What does a Datatype in java refer to?

- The place where data is stored
- The technique how data is retrieved
- The type or variety of data being handled for reading and writing
- None of the above

Ans: c. The type or variety of data being handled for reading and writing

Explanation: It specifies the kind of values that variables can hold, such as integers, floating-point numbers, characters, etc.

35. What happens when you try to assign a larger data type to a smaller data type without explicit casting in Java?

- The compiler automatically performs a narrowing conversion
- It results in a compilation error
- Java automatically promotes the smaller type to the larger type
- Runtime error

Ans: d. Runtime error

Explanation: In Java, assigning a larger data type to a smaller data type without explicit casting results in a compilation error because it may result in loss of data or precision.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

36. What will be the result of the following expression?

```
int x=5;  
  
int y=2;  
  
int result = x/y;  
  
System.out.println(result);
```

- a. 2.5
- b. 2.0
- c. 2
- d. Compilation Error

Ans: c. 2

Explanation: In Java, when you divide two integers (int x = 5; int y = 2;), the result is an integer. Therefore, x/y results in 2, not 2.5 or 2.0

37. Which data type is used to store true or false values without taking up much memory?

- a. boolean
- b. bit
- c. char
- d. binary

Ans: a. boolean

Explanation: The boolean data type in Java is used to store true or false values efficiently, taking up very little memory (typically one bit).



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

38. Which data type among the following is an implementation of Objects or OOPs?

- a. byte
- b. int
- c. char
- d. None of the above

Ans: d. None of the above

Explanation: None of the primitive data types (byte, int, char, etc.) in Java are implementations of Objects or Object-Oriented Programming (OOP) concepts.

39. What is a Primitive data type?

- a. Data type, which is implemented in an Object-oriented way
- b. Data type, which is implemented in a machine-dependent way
- c. Data type, which is implemented in a non-Object-oriented way
- d. None of the above

Ans: c. Data type, which is implemented in a non-Object-oriented way

Explanation: They directly represent simple values and are handled more efficiently by the Java runtime compared to objects.

40. Which among the following is not a Datatype in Java?

- a. short
- b. int
- c. long double
- d. double

Ans: c. long double

Explanation: long double is not one of the standard data types in Java



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

41. Which among the following is not a valid Datatype in Java?

- a. long
- b. bool
- c. double
- d. float

Ans: b. bool

Explanation: In Java, bool is not a valid data type. Instead, Java uses boolean to represent true/false values

42. Which is the data type that is not recommended for numeric applications?

- a. Byte
- b. Float
- c. Int
- d. Long

Ans: a. Byte

Explanation: The byte data type is generally not recommended for numeric applications due to its limited range, which is only from -128 to 127.

43. Choose the right statement about java data type.

- a. Integer data types are short, int and long
- b. Real number data types are float and double
- c. The character data type is char
- d. All the above

Ans: d. All the above

Explanation: Statements a, b, and c accurately describe Java data types: integers include short, int, and long; real numbers use float and double; and char represents characters.

IT Support and Development Training Programme

Creating Employable Engineers and Entrepreneurs



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

44. In Java, which of the following are signed by default: byte, short and long?

- a. All are signed
- b. None of them are signed
- c. Only long is signed
- d. Only short is signed

Ans: a. All are signed

Explanation: In Java, the byte, short, and long data types are all signed. This means they can represent both positive and negative values. The byte type is an 8-bit signed integer, short is a 16-bit signed integer, and long is a 64-bit signed integer.

45. Which of the following is not an automatic type conversion?

- a. short to int
- b. byte to int
- c. int to long
- d. long to int

Ans: d. long to int

Explanation: In Java, int to long conversion is automatic because long has a larger storage size than int. Automatic type conversion occurs when moving from a smaller to a larger data type (widening conversion).



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

46. Which data type would be most suitable for storing the age of a person?

- a. int
- b. double
- c. boolean
- d. char

Ans: a. int

Explanation: The int data type is suitable for storing the age of a person because age is a whole number and int can efficiently represent whole numbers.

47. What happens when you try to assign a smaller data type to a larger data type without explicit casting in Java?

- a. Error is flagged by the compiler
- b. Automatic Promotion is carried out by Java
- c. No change takes place
- d. Promotion must be carried out by the programmer

Ans: b. Automatic Promotion is carried out by Java

Explanation: Java automatically converts smaller data types to larger ones when needed, without any extra effort from the programmer.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Data Types	Last updated on	18 July 2024

48. What is a constant in Java?

- a. A value that cannot be changed
- b. A variable that is initialized only once
- c. A fixed value that remains the same throughout the program
- d. All of the above

Ans: d. All of the above

Explanation: In Java, a constant is a value that cannot be changed, a variable that is initialized only once, and a fixed value that remains the same throughout the program.

49. Are 'a' and "a" the same in Java?

- a. Both are strings
- b. Both are characters
- c. 'a' is a character and "a" is a string
- d. Both are not valid in Java

Ans: c. 'a' is a character and "a" is a string

Explanation: In Java, 'a' is a character literal of type char, while "a" is a string literal of type String. They are different types and used differently in Java.

50. Choose the operand(s) from the options:

- a. Variable
- b. Constant
- c. Numerical value
- d. All the above

Ans: D. All the above

Explanation: In Java, operands can be variables, constants, or numerical values. All of these can be used in expressions for operations.

IT Support and Development Training Programme

Creating Employable Engineers and Entrepreneurs