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

a. byte

b. int

c. float

d. string

Answer: d. string

What is type casting in Java?

a. Converting a value of one data type to another data type

b. Converting a value of one primitive data type to another primitive data type

c. Converting an object of one class to an object of another class

d. All of the above

Answer: d. All of the above

What is the use of the final keyword in Java?

a. To define a constant variable

b. To prevent a class from being inherited

c. To prevent a method from being overridden

d. All of the above

Answer: d. All of the above

Which of the following is not true about static variables in Java?

a. They are shared among all instances of a class

b. They can be accessed without creating an object of the class

c. They can be modified by any method in the class

d. They are created once when the class is loaded into memory

Answer: c. They can be modified by any method in the class

What is a wrapper class in Java?

a. A class that wraps around a primitive data type

b. A class that wraps around a string

c. A class that wraps around an object

d. A class that wraps around a method

Answer: a. A class that wraps around a primitive data type

What is the purpose of the equals() method in Java?

a. To compare two objects for equality

b. To check if two objects refer to the same memory location

c. To check if two objects are of the same data type

d. To convert a primitive data type to an object

Answer: a. To compare two objects for equality

How can you take input from the user in Java?

a. Using the Scanner class

b. Using the Console class

c. Using the BufferedReader class

d. All of the above

Answer: d. All of the above

What is a method in Java?

a. A block of code that performs a specific task

b. A collection of variables

c. A collection of classes

d. A collection of data types

Answer: a. A block of code that performs a specific task

What is pass by value in Java?

a. When a copy of the actual parameter is passed to the method

b. When the actual parameter itself is passed to the method

c. When a reference to the actual parameter is passed to the method

d. None of the above

Answer: a. When a copy of the actual parameter is passed to the method

What is pass by reference in Java?

a. When a copy of the actual parameter is passed to the method

b. When the actual parameter itself is passed to the method

c. When a reference to the actual parameter is passed to the method

d. None of the above

Answer: c. When a reference to the actual parameter is passed to the method

What is the result of the following code snippet?

int x = 10;

double y = 4.5;

double z = x / y;

System.out.println(z);

a) 2.22

b) 2.0

c) 2.5

d) 2.222

Answer: b) 2.0

What is the output of the following code snippet?

int num = 10;

float fnum = num;

System.out.println(fnum);

a) 10.0

b) 10

c) 10.0f

d) Compilation Error

Answer: a) 10.0

Which of the following is true about the final keyword in Java?

a) A final variable can be changed once it has been initialized

b) A final method can be overridden by a subclass

c) A final class can be extended by another class

d) None of the above

Answer: d) None of the above

Which of the following statements about static variables in Java is true?

a) A static variable is an instance variable

b) A static variable is a local variable

c) A static variable is shared among all instances of a class

d) A static variable is always initialized to null

Answer: c) A static variable is shared among all instances of a class

What is the output of the following code snippet?

Integer num = 5;

System.out.println(num.toString());

a) "5"

b) 5

c) Compilation Error

d) Runtime Error

Answer: a) "5"

Which of the following statements is true about the equals() method in Java?

a) It is used to compare two primitive data types

b) It is used to compare two objects for equality

c) It is used to compare the memory location of two objects

d) It is used to compare the size of two arrays

Answer: b) It is used to compare two objects for equality

Which of the following is the correct way to take input from the user in Java?

a) Scanner input = new Scanner(System.in);

b) BufferedReader input = new BufferedReader(new InputStreamReader(System.in));

c) Console input = System.console();

d) All of the above

Answer: d) All of the above

Which of the following is true about methods in Java?

a) A method can have multiple return statements

b) A method can have multiple parameters with the same name

c) A method can be overloaded

d) A method can have no parameters

Answer: c) A method can be overloaded

Which of the following is true about pass-by-value and pass-by-reference in Java?

a) Java uses only pass-by-value

b) Java uses only pass-by-reference

c) Java uses both pass-by-value and pass-by-reference

d) Java does not support passing arguments to methods

Answer: a) Java uses only pass-by-value

What is the output of the following code snippet?

public static void main(String[] args) {

int num = 5;

change(num);

System.out.println(num);

}

public static void change(int x) {

x = x + 1;

}

a) 4

b) 5

c) 6

d) Compilation Error

Answer: b) 5

What is the output of the following code?

int num = 10;

System.out.println(num/3);

a) 3

b) 3.33

c) 3.0

d) Compilation error

Answer: c) 3.0

What will be the output of the following code snippet?

int a = 9, b = 4;

double c = a / b;

System.out.println(c);

a) 2.25

b) 2.0

c) 2

d) Compilation error

Answer: b) 2.0

Which of the following statements is true regarding Type Casting in Java?

a) Widening conversion can be done implicitly.

b) Narrowing conversion can be done implicitly.

c) Widening conversion can be done explicitly.

d) Narrowing conversion can be done explicitly.

Answer: c) Widening conversion can be done explicitly.

Which of the following is a valid syntax for declaring a final variable in Java?

a) final int x = 10;

b) int final x = 10;

c) int x = final 10;

d) None of the above

Answer: a) final int x = 10;

What is the output of the following code?

public class Test {

static int x = 10;

public static void main(String[] args) {

Test t1 = new Test();

Test t2 = new Test();

t1.x = 20;

System.out.println(t2.x);

}

}

a) 10

b) 20

c) Compilation error

d) Runtime error

Answer: b) 20

Which of the following is not a Wrapper class in Java?

a) Integer

b) Boolean

c) Char

d) Double

Answer: c) Char

What does the equals() method do in Java?

a) It compares the object references for equality.

b) It compares the object contents for equality.

c) It returns a hash code for the object.

d) It creates a copy of the object.

Answer: b) It compares the object contents for equality.

Which of the following is a valid way to take user input in Java?

a) Scanner sc = new Scanner(System.in);

b) BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

c) Both a and b

d) None of the above

Answer: c) Both a and b

Which of the following is not a method in Java?

a) Constructor

b) Static block

c) Instance block

d) Destructor

Answer: d) Destructor

In Java, which of the following is true regarding Pass by Value and Pass by Reference?

a) Java supports only Pass by Value.

b) Java supports only Pass by Reference.

c) Java supports both Pass by Value and Pass by Reference.

d) None of the above.

Answer: a) Java supports only Pass by Value.