

# 17 Lecture - CS301

## Important Mcqs

1. Which of the following data types is a reference type in Java?
- a) int
  - b) double
  - c) String
  - d) char

Answer: c) String

2. What does a reference variable in Java hold?
- a) The actual value of an object
  - b) The memory address of an object
  - c) The size of an object
  - d) The type of an object

Answer: b) The memory address of an object

3. When an object is assigned to a reference variable, what is stored in the variable?
- a) A copy of the object
  - b) A reference to the object
  - c) The value of the object
  - d) None of the above

Answer: b) A reference to the object

4. What is the difference between a reference variable and a primitive variable?
- a) A reference variable holds the actual value of an object, while a primitive variable holds a reference to an object.
  - b) A reference variable holds a reference to an object, while a primitive variable holds the actual value of a data type.
  - c) A reference variable holds a value of an object, while a primitive variable holds a reference to an object.
  - d) There is no difference between the two.

Answer: b) A reference variable holds a reference to an object, while a primitive variable holds the actual value of a data type.

5. In Java, can a reference variable be null?
- a) Yes
  - b) No

Answer: a) Yes

6. **What happens when a reference variable is assigned to another reference variable?**
- a) Both variables hold a reference to the same object
  - b) Both variables hold a copy of the same object
  - c) The original variable is deleted
  - d) None of the above

**Answer: a) Both variables hold a reference to the same object**

7. **What is the syntax for creating a reference variable in Java?**
- a) `int x = 5;`
  - b) `double y = 3.14;`
  - c) `String s = "Hello";`
  - d) `char c = 'a';`

**Answer: c) `String s = "Hello";`**

8. **What happens when a reference variable is passed as a parameter to a method in Java?**
- a) The method receives a copy of the object
  - b) The method receives a reference to the object
  - c) The method receives the actual value of the object
  - d) None of the above

**Answer: b) The method receives a reference to the object**

9. **What is the default value of a reference variable in Java?**
- a) null
  - b) 0
  - c) false
  - d) None of the above

**Answer: a) null**

10. **Can a reference variable be used to access static methods in Java?**
- a) Yes
  - b) No

**Answer: a) Yes**