**ASSIGNMENT NO:6**

1) What is method overloading in Java & explain with an example.?

2) What are the rules for method overloading resolution in Java? How does Java determine which overloaded method to call?

3) What does the static keyword mean in Java? Explain the difference between static and non-static methods.

4) Can static methods be overloaded and overridden in Java?How are static variables shared across multiple instances of a class?

5) What is the role of the static keyword in the context of memory management.

6) What is the significance of the final keyword in Java?

7)Can a final method be overridden in a subclass?How does the final keyword affect variables, methods, and classes in Java?

8) What does the this keyword represent in Java?How is the this keyword used in constructors and methods?

9) What are narrowing and widening conversions in Java?

10) Provide examples of narrowing and widening conversions between primitive data types.

11) How does Java handle potential loss of precision during narrowing conversions?

12) Explain the concept of automatic widening conversion in Java.

13) What are the implications of narrowing and widening conversions on type compatibility and data loss?











