Ex No: 12 **Reverse Engineering**

Aim: To reverse engineer a simple java code.

Procedure:

Reverse-engineering is the act of dismantling an object to see how it works. Software reverse-engineering focuses on a program's machine code(0s,1s). Program language statements are used to turn the machine code back into the original source code.

Tools Used: Java Decompiler

- A Java Decompiler is a special type of decompiler which takes a class file as input and produces Java source code as output.
- The decompilation is exactly the reverse process of compilation.
- It does not replicate source code

ex12.java

```
import java.util.*;

public class ex12 {
   //method that returns maximum number
   private static int findMax(int arr[]){
      int max=arr[0];
      for(int i=0;i<arr.length;i++){
         if(max<arr[i])
            max=arr[i];
      }
      return max;
   }

    public static void main(String args[]){
            int vals[] = {4,2,7,19,1};
            int max;
            ex12 obj = new ex12();
            max = obj.findMax(vals);
            System.out.println("Maximum value in array is "+max);
    }
}
```

Result:

Thus Reverse Engineering is performed on a simple Java Program using Java Decompiler and the results are successfully verified.