Mega Drive

1. Write the Output ?

```
public class Test {

    public static void main(String[] args) {

        int a = 5, b = 3, c = 7;

        int result = (a > b) ? ((b > c) ? b : c) : a;

        System.out.println(result);

        }

    }
```

2. Write the Output ?

```
public class StringTest {
   public static void main(String[] args) {
      String s = "hello";
      s = s.toUpperCase();
      s = s.concat(" WORLD");
      System.out.println(s);
   }
}
```

3. Write the Output ?

```
public class Test {

    public static void main(String[] args) {

    int x = 10;

    x = x++ + ++x - x-- - --x;

    System.out.println(x);

    }

}
```

4. Write the Output ?

```
public class LoopTest {
        public static void main(String[] args) {
                for (int i = 1; i <= 5; i++) {
                  for (int j = 1; j <= i; j++) {
                      System.out.print("*");
                        }
                  System.out.println();
                }
            }
        }
```

5. Write the Output ?

```
public class Test {
   public static void main(String[] args) {
      int[] nums = {2, 4, 6, 8};
      for (int i = nums.length - 1; i >= 0; i--) {
         System.out.print(nums[i] + " ");
      }
   }
}
```

6. Write the Output ?

```
public class Test {
   public static void main(String[] args) {
      String s1 = "Java";
      String s2 = "Java";
      String s3 = new String("Java");
```

```
        System.out.println(s1 == s2);
        System.out.println(s1 == s3);
        System.out.println(s1.equals(s3));
    }
}
```

7. Write the Output ?

```
public class Test {
    public static void main(String[] args) {
        StringBuilder sb = new StringBuilder("123");
        sb.append("456");
        sb.delete(2, 4);
        System.out.println(sb);
    }
}
```

8. Write the Output ?

```
public class Test {
    public static void main(String[] args) {
        int count = 0;
        for (int i = 1; i <= 10; i++) {
            if (i % 2 == 0) {
                count++;
            }
        }
        System.out.println(count);
    }
```

```
}
```

9. Write the Output ?

```
public class Test {
   public static void main(String[] args) {
      int x = 5;
      int y = 10;
      while (x < y) {
         System.out.print(x + " ");
         x += 2;
      }
   }
}
```

10. Write the Output ?

```
public class Test {
   public static void main(String[] args) {
      int a = 2;
      int b = 3;
      int c = 4;
      System.out.println(a | b & c);
   }
}
```

11. Write the Output ?

```
public class Test {
   public static void main(String[] args) {
      int[] nums = {1, 2, 3, 4, 5};
```

```
        for (int i : nums) {
            if (i % 2 == 0) continue;
            System.out.print(i + " ");
        }
    }
}
```

12. Write the Output ?

```
public class Test {
    public static void main(String[] args) {
        String str1 = "abcd";
        String str2 = str1.substring(1, 3);
        System.out.println(str2);
    }
}
```

13. Write the Output ?

```
public class Test {
    public static void main(String[] args) {
        int[] arr = {10, 20, 30, 40, 50};
        int sum = 0;
        for (int i = 0; i < arr.length; i++) {
            if (i % 2 == 0) {
                sum += arr[i];
            }
        }
        System.out.println(sum);
```

```
    }
}
```

14. Write the Output ?

```
public class Test {
    public static void main(String[] args) {
        int num = 10;
        do {
            System.out.print(num + " ");
            num--;
        } while (num > 0 && num % 2 == 0);
    }
}
```

15. Write the Output ?

```
public class Test {
    public static void main(String[] args) {
        StringBuffer sb = new StringBuffer("Java");
        sb.insert(2, "Hello");
        System.out.println(sb);
    }
}
```

16. Write the Output ?

```
public class Test {
    public static void main(String[] args) {
        int a = 5, b = 10, c = 15;
        System.out.println(a < b && b > c || c > b);
```

```
    }
}
```

17. Write the Output ?

```
public class Test {
    public static void main(String[] args) {
        int a = 2;
        a <<= 1;
        a >>= 2;
        System.out.println(a);
    }
}
```

18. Write the Output ?

```
public class Test {
    public static void main(String[] args) {
        String s1 = "abc";
        String s2 = "abc";
        String s3 = new String("abc");
        System.out.println(s1 == s2);
        System.out.println(s1.equals(s3));
        System.out.println(s2 == s3);
    }
}
```

19. Write the Output ?

```
public class Test {
    public static void main(String[] args) {
```

```
        char ch = 'A';
        for (int i = 0; i < 5; i++) {
            System.out.print(ch++);
        }
    }
}
```

20. Write the Output ?

```
public class Test {
    public static void main(String[] args) {
        int x = 10, y = 5;
        if (x % y == 0) {
            System.out.println("Divisible");
        } else {
            System.out.println("Not Divisible");
        }
    }
}
```

Coding questions

1)Write a java program to display the string in a given format?

Input: ABBCCCDDDD
Output: A1B2C3D4

2)Write a java program to merge two arrays and display them in sorting order?

Input: 5 2 1 3 4 9 7 8 6 10
Output: 1 2 3 4 5 6 7 8 9 10

3)Write a java program to concatenate two strings?

Input:

str1=”ihub23” ;

str2=”talent24 “;

Output: ihubtalent47

4) Write a java program to multiply two arrays?

Input: arr1 = 5 3 2 arr2 = 1 4

Output: 7448 (532*14)

5)Write a spring boot program for postMapping and getMapping with service and controller class with application.yml/properties file?

6)Write a java program to display permutation of given string?

Input:

ABC

Output:

ABC

ACB

BAC

BCA

CBA

CAB

7) Write a servlet program to insert the record into the student table. Create the form.html file for sno, sanme, sadd and this data into database write web.xml file

8) Write a Java program to find all duplicate elements in an integer array using a `HashMap`.

9) Write a Java program to compare two dates and determine if they are equal.

10) Find the second highest salary from an employee table.

ID	NAME	SALARY	DEPTNO	JOB	HIREDATE
1007	Alan	70000	10	Clerk	01-MAR-20
1210	Jose	35000	10	Clerk	15-FEB-19
1163	Mark	13000	20	Manager	23-DEC-23
1109	Kelvin	40000	20	Manager	29-JUL-22
1021	Lara	25000	30	Hr	07-SEP-21
1298	Erick	10000	30	Hr	12-OCT-18
1345	Brook	18000	40	Salesman	19-APR-22