

FULL STACK DEVELOPMENT – WORKSHEET 5

FIND OUTPUT OF THE PROGRAMS WITH EXPLANATION

Q1.//Stringbuffer

```
public class Main
{
    public static void main(String args[])
    {
        String s1 = "abc";
        String s2 = s1;
        s1 += "d";
        System.out.println(s1 + " " + s2 + " " + (s1 == s2));
        StringBuffer sb1 = new StringBuffer("abc");
        StringBuffer sb2 = sb1;
        sb1.append("d");
        System.out.println(sb1 + " " + sb2 + " " + (sb1 == sb2));
    }
}
```

Answer 1. A string buffer is like a String, but can be modified. At any point in time it contains some particular sequence of characters, but the length and content of the sequence can be changed through certain method calls.

abcd abc false this is because of the first statement given that s1 should be exactly equals to s2, but abcd is not equals to abc.

abcd abcd true this is because of the Second statement given that sb1 should be exactly equals to sb2 and here abcd is equal to abcd.

Q2.// Method overloading

```
public class Main
{
    public static void FlipRobo(String s)
    {
        System.out.println("String");
    }
}
```

```

}

public static void FlipRobo(Object o)
{
    System.out.println("Object");
}

public static void main(String args[])
{
    FlipRobo(null);
}
}

```

Answer2. Method overloading occurs when a subclass has the same method as the parent class.

The output of the above program is **"String"**.

Q3.

```

class First
{
    public First() { System.out.println("a"); }
}

class Second extends First
{
    public Second() { System.out.println("b"); }
}

class Third extends Second
{
    public Third() { System.out.println("c"); }
}

public class MainClass
{
    public static void main(String[] args)
    {
        Third c = new Third();
    }
}

```

```
}  
}
```

Answer3. a
 b
 c

```
Q4.public class Calculator  
{  
int num = 100;  
public void calc(int num) { this.num = num * 10; }  
public void printNum() { System.out.println(num); }  
public static void main(String[] args)  
{  
Calculator obj = new Calculator();  
obj.calc(2);  
obj.printNum();  
}  
}
```

Answer 4. 20

```
Q5.public class Test  
{  
public static void main(String[] args)  
{  
StringBuilder s1 = new StringBuilder("Java");  
String s2 = "Love";  
s1.append(s2);  
s1.substring(4);  
int foundAt = s1.indexOf(s2);  
System.out.println(foundAt);  
}
```

```
}
```

```
}
```

Answer5. 4

Q6. class Writer

```
{
```

```
public static void write()
```

```
{
```

```
System.out.println("Writing...");
```

```
}
```

```
}
```

```
class Author extends Writer
```

```
{
```

```
public static void write()
```

```
{
```

```
System.out.println("Writing book");
```

```
}
```

```
}
```

```
public class Programmer extends Author
```

```
{
```

```
public static void write()
```

```
{
```

```
System.out.println("Writing code");
```

```
}
```

```
public static void main(String[] args)
```

```
{
```

```
Author a = new Programmer();
```

```
a.write();
```

```
}
```

```
}
```

Answer6. Writing book

Q7.class FlipRobo

```
{  
public static void main(String args[])  
{  
String s1 = new String("FlipRobo");  
String s2 = new String("FlipRobo");  
if (s1 == s2)  
System.out.println("Equal");  
else  
System.out.println("Not equal");  
}  
}
```

Answer7. Not equal

Q8.class FlipRobo

```
{  
public static void main(String args[])  
{  
try  
{  
System.out.println("First statement of try block");  
int num=45/3;  
System.out.println(num);  
}  
catch(Exception e)  
{  
System.out.println("FlipRobo caught Exception");  
}  
}
```

```

finally
{
System.out.println("finally block");
}
System.out.println("Main method");
}
}

```

Answer8. First statement of try block
 15
 finally, block
 Main method

```

Q9.class FlipRobo
{
// constructor
FlipRobo()
{
System.out.println("constructor called");
}
static FlipRobo a = new FlipRobo(); //line 8
public static void main(String args[])
{
FlipRobo b; //line 12
b = new FlipRobo();
}
}

```

Answer9. constructor called
 constructor called

```
Q10.class FlipRobo
{
static int num;
static String mystr;
// constructor
FlipRobo()
{
num = 100;
mystr = "Constructor";
}
// First Static block
static
{
System.out.println("Static Block 1");
num = 68;
mystr = "Block1";
}
// Second static block
static
{
System.out.println("Static Block 2");
num = 98;
mystr = "Block2";
}
public static void main(String args[])
{
FlipRobo a = new FlipRobo();
System.out.println("Value of num = " + a.num);
System.out.println("Value of mystr = " + a.mystr);
}
```

}

Answer10. Static Block 1

Static Block 2

Value of num = 100

Value of mystr = Constructor