



Loop with Condition Assessment:

1. Simulate and show the output of the given program: Note that incorrect simulation leads to incorrect OUTPUT

```
public static void main(String[] args)
{
    int theNumber = 23100, factor = 1;
    System.out.print("Factors of "+ theNumber + " are ");
    do
    {
        if (factor != 1)
        {
            if (theNumber % factor == 0)
            {
                theNumber = theNumber / factor;
                System.out.print(factor + " ");
            }
            if ((theNumber % factor) != 0)
            {
                factor++;
            }
            if (factor > theNumber)
            {
                factor = 0;
            }
        }
        else
        {
            factor++;
        }
    } while (factor != 0);
}
```

Simulation of Loop with Condition_Lec_Assessment						
Accumulator/Counter						Output:
Variable		Conditions				
theNumber	factor	factor != 1	remainder == 0	remainder != 0	factor > theNumber	factor != 0
23100	1	F	T	F	F	T
11550	2	T	T	T	F	T
5775	3	T	T	T	F	T
1925	4	T	F	T	F	T
385	5	T	T	F	F	T
77	6	T	T	T	F	T
11	7	T	F	T	F	T
1	8	T	T	T	F	T
	9	T	F	T	F	T
	10	T	F	T	F	T
	11	T	F	T	F	T
	12	T	T	T	T	T
	0	T				F