# Terminal Output comments

The recipe, named as "*recipe1*", comprises three separate *OperationsToDo* that need to be accomplished:

- “Print” using a 3DPrinter
- “Engrave” using a Milling Machine
- “Drill” using a Milling Machine

```
recipe1: [(Print,Printer)(Engrave,MillingMachine)(Drill,MillingMachine)]
```

For each *OperationsToDo* some constraints were defined, that the *OperationsDone* need to satisfy. This recipe is utilized to create six unique products. Each product will be manufactured using different *OperationsDone*, allowing for a variety of test cases.
The product named “*product1_respected*”, has been manufactured according to the operations outlined in the recipe, with all operations adhering to the specified constraints:

```
product1_respected: [recipe_respected|constraints_respected]->[V|V]
        (Print,Printer)->[V]
        (Engrave,MillingMachine)->[V]
        (Drill,MillingMachine)->[V]
```

The product named “*product2_wrong_order*”, was produced using the operations outlined in the recipe, but in the wrong sequence. The executed order was (Engrave,Print,Drill), while it should have been (Print,Engrave,Drill). However, the final operation, which is correctly positioned, adhered to the specified constraints:

```
product2_wrong_order: [recipe_respected|constraints_respected]->[X|X]
        (Engrave,MillingMachine)->[X]
        (Print,Printer)->[X]
        (Drill,MillingMachine)->[V]
```

The product named “*product3_missing_op*”, was manufactured using only the first two operations specified in the recipe respecting all the imposed constraints, but it omits the final operation:

```
product3_missing_op: [recipe_respected|constraints_respected]->[X|X]
        (Print,Printer)->[V]
        (Engrave,MillingMachine)->[V]
```

The product named “*product3_extra_op*”, was produced using all the operations specified in the recipe (respecting the constraints), but it includes an additional operation (the final one) that isn’t required by the recipe:

```
product4_extra_op: [recipe_respected|constraints_respected]->[X|X]
        (Print,Printer)->[V]
        (Engrave,MillingMachine)->[V]
        (Drill,MillingMachine)->[V]
        (Drill,MillingMachine)->[X]
```

The product named “*product5_wrong_op*”, was manufactured using an operation not specified by the recipe, specifically the middle one. It’s worth noting that that the first and the last operations are in the correct position, and adhere to the constraints:

```
product5_wrong_op: [recipe_respected|constraints_respected]->[X|X]
        (Print,Printer)->[V]
```

```
            (Mill,MillingMachine)->[X]
            (Drill,MillingMachine)->[V]
```

The product named "*product6_!cons_respected*", was manufactured using the correct operations and machines as specified by the recipe, however, the first and the second operations doesn't respect the constraints:

```
      product6_!cons_respected: [recipe_respected|constraints_respected]->[V|X]
            (Print,Printer)->[X]
            (Engrave,MillingMachine)->[X]
            (Drill,MillingMachine)->[V]
```