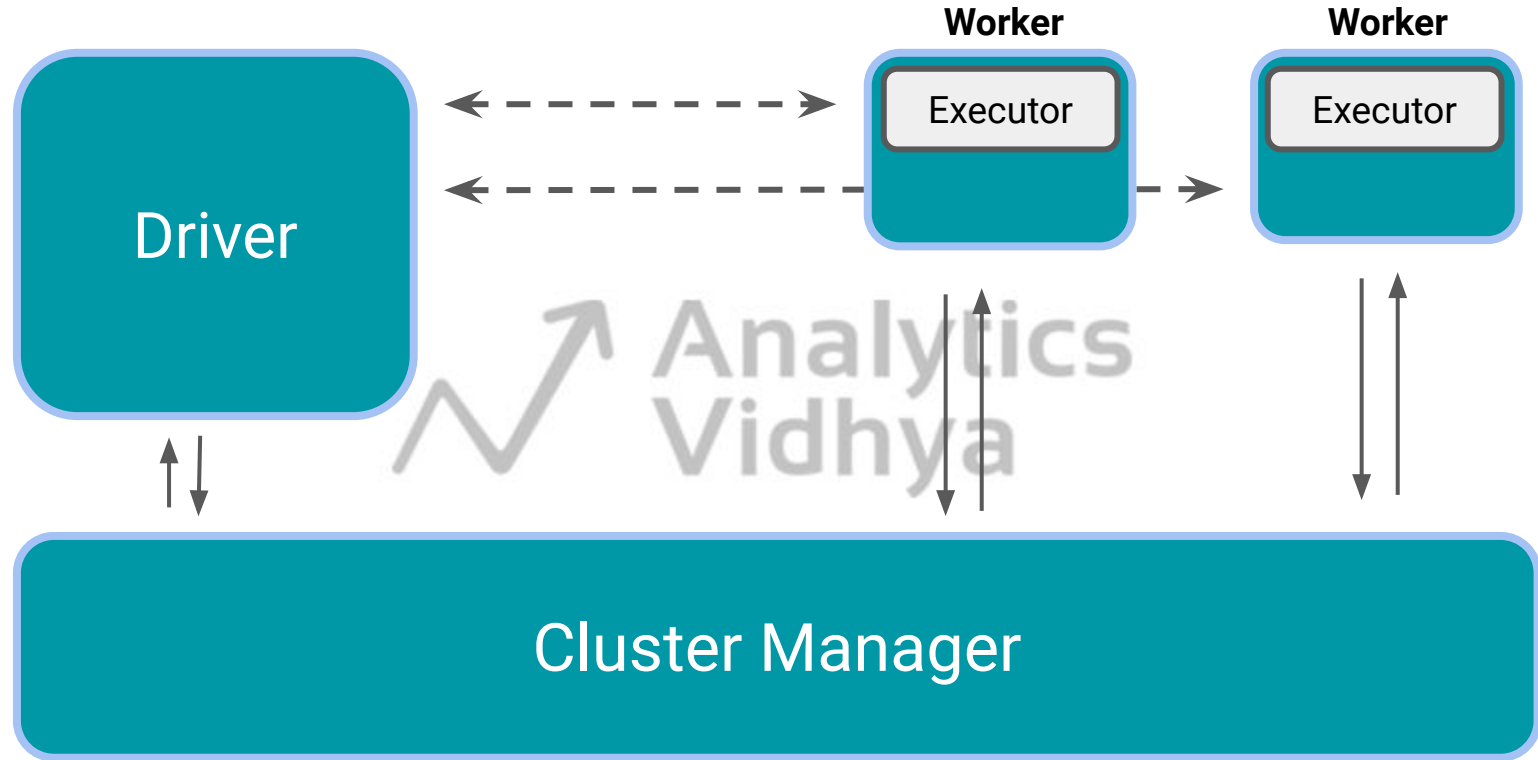
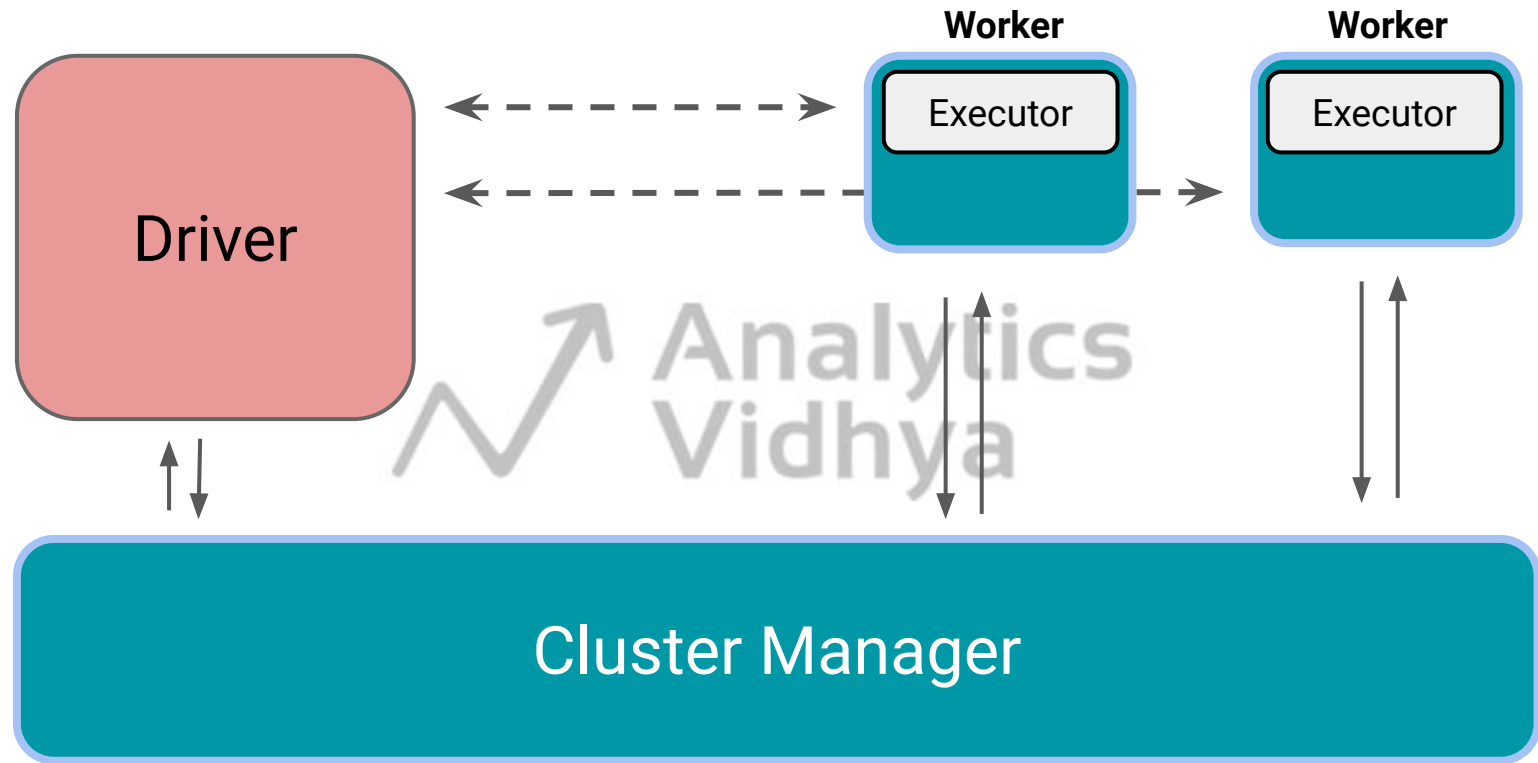
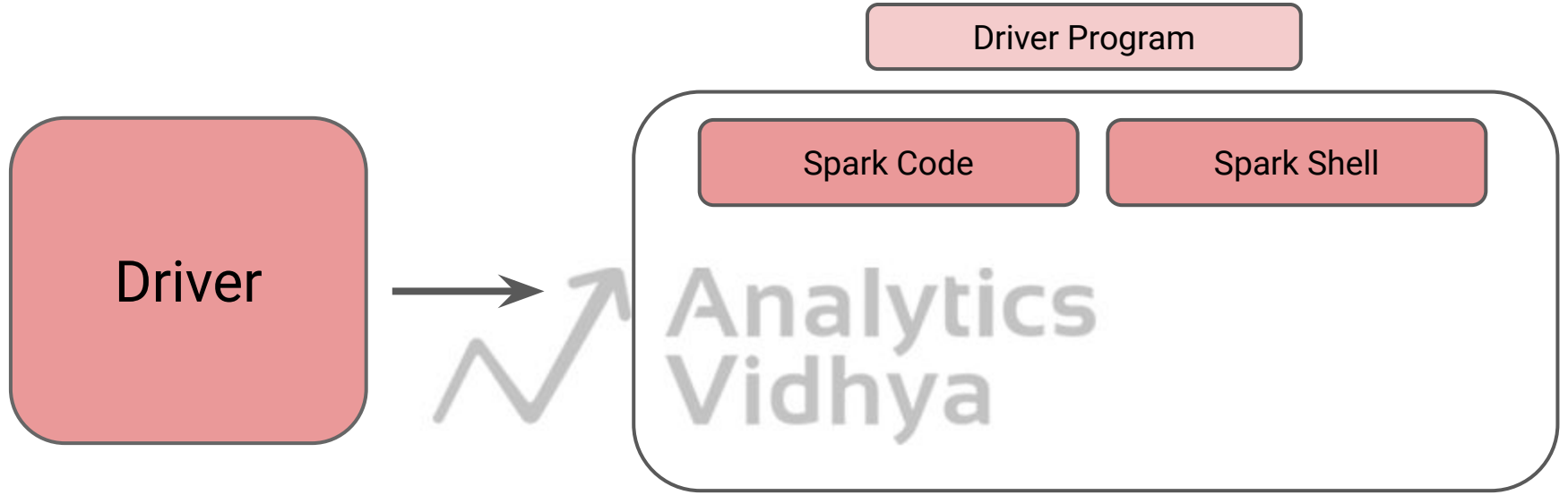


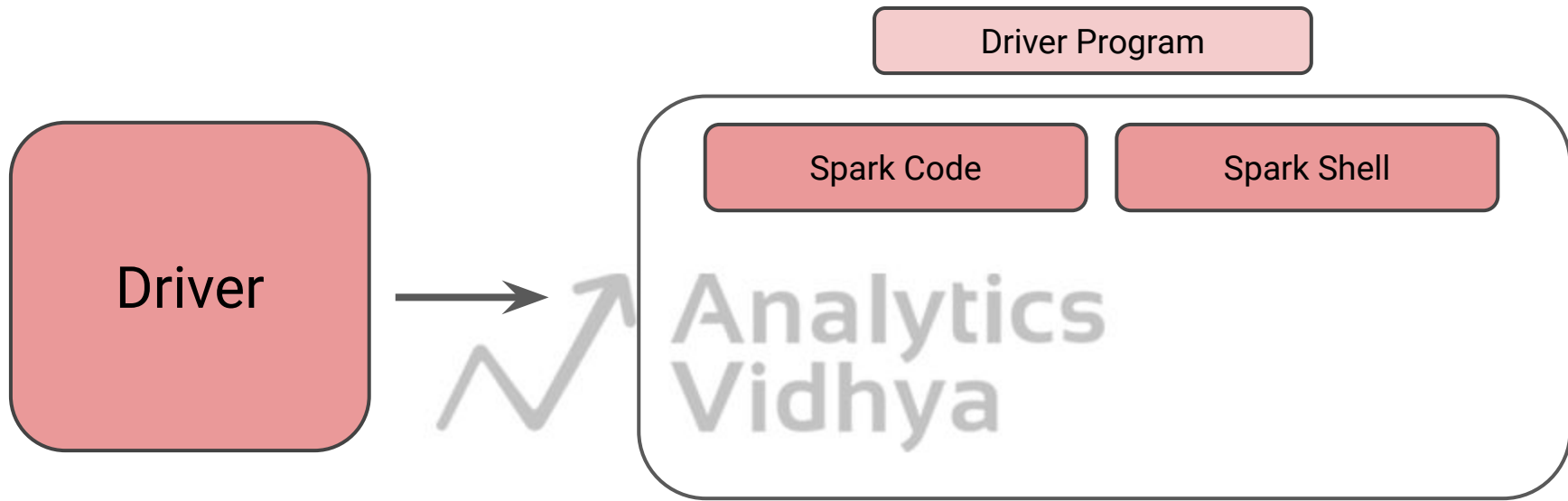
Deep Dive into Apache Spark

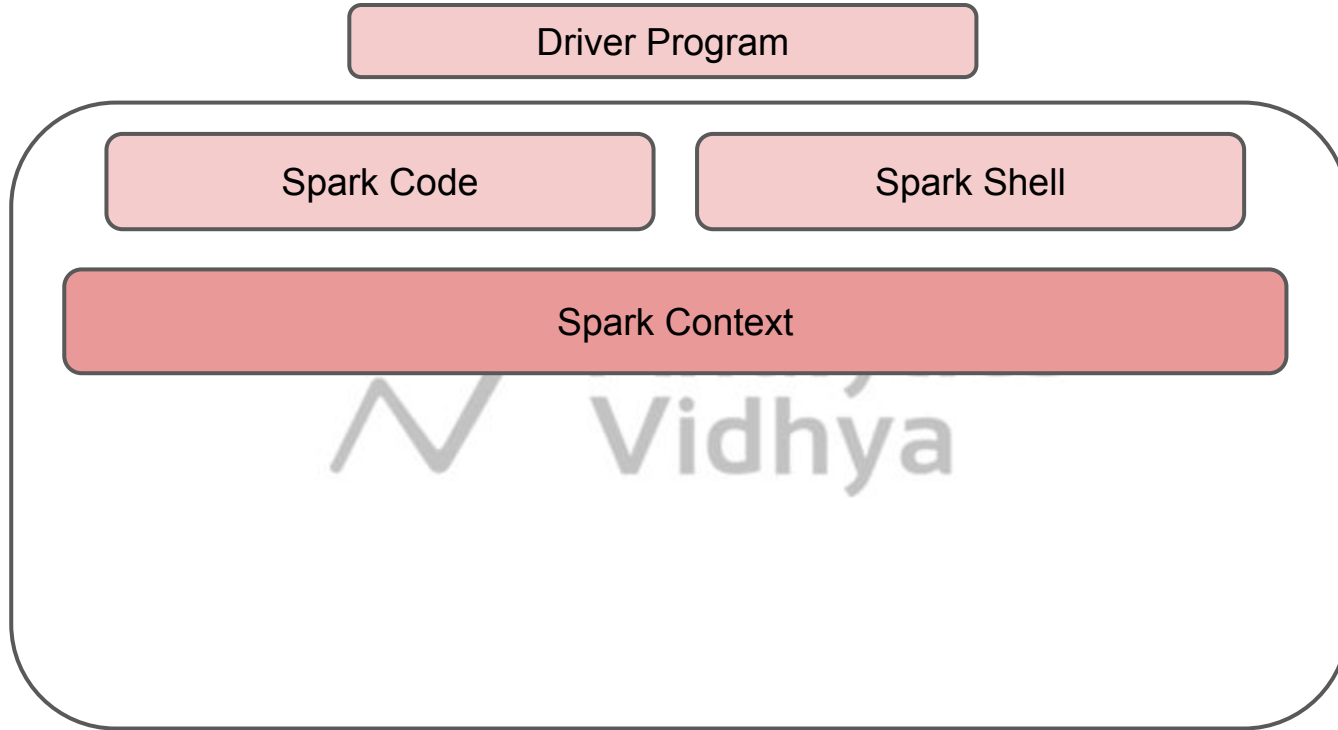
Spark Architecture











Spark Code vs Spark Shell



Spark Code

- Run as independent programs
- Example: Python, Scala or Java code and jobs such as ETL processing, streaming

vs.

Spark Shell

- Allows interactive exploration and manipulation of data
- Example: REPL using Python or Scala

Spark Code

```
[1]: from pyspark import SparkContext

     sc = SparkContext()

     sc
```

```
[1]: SparkContext
```

```
[1]: SparkContext
```

Spark UI


| | |
|---------|--------------------|
| Version | v2.3.0.2.6.5.0-292 |
|---------|--------------------|

| Master | local[*] |
|--------|----------|
| 1 | 1 |
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| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
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| 98 | 98 |
| 99 | 99 |
| 100 | 100 |

| | |
|---------|---------------|
| AppName | pyspark-shell |
|---------|---------------|

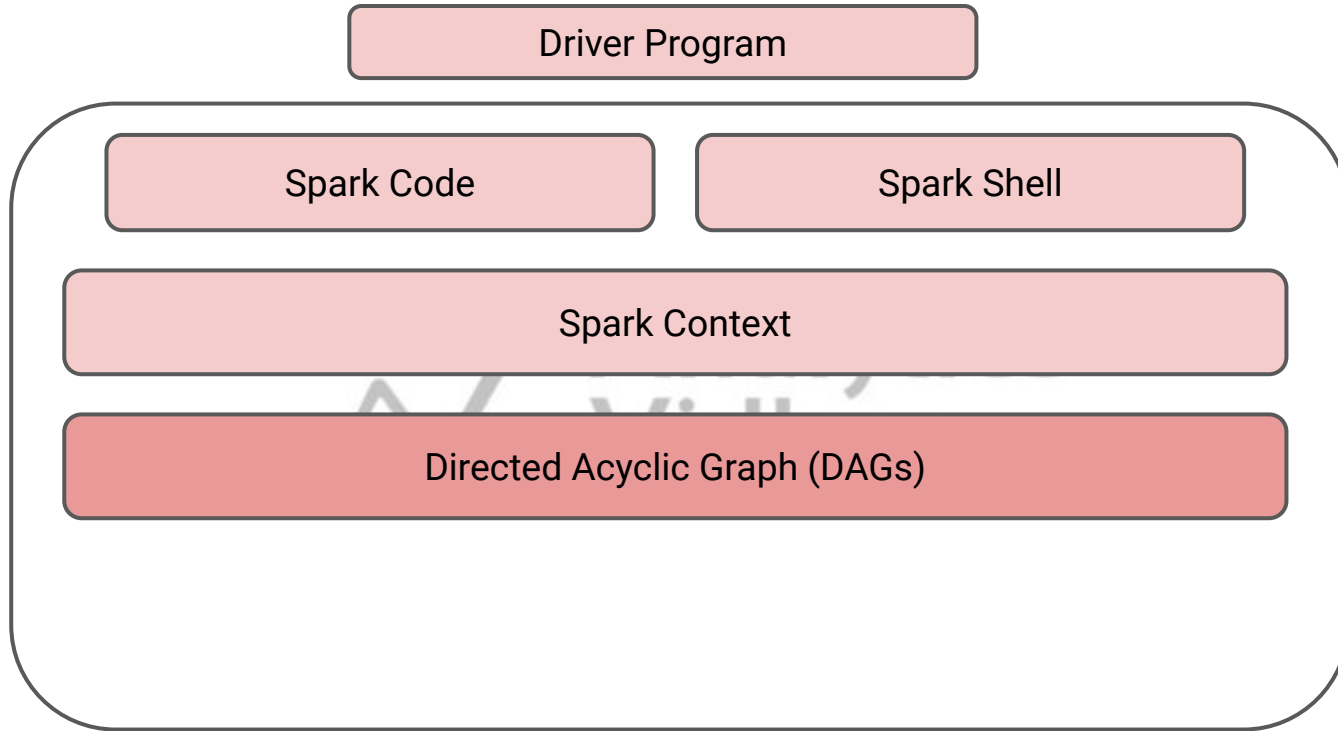
Spark Shell

```
Spark context Web UI available at http://10.0.2.15:4040
Spark context available as 'sc' (master = local[*], app id = local-1585664544629).
Spark session available as 'spark'.
Welcome to
```

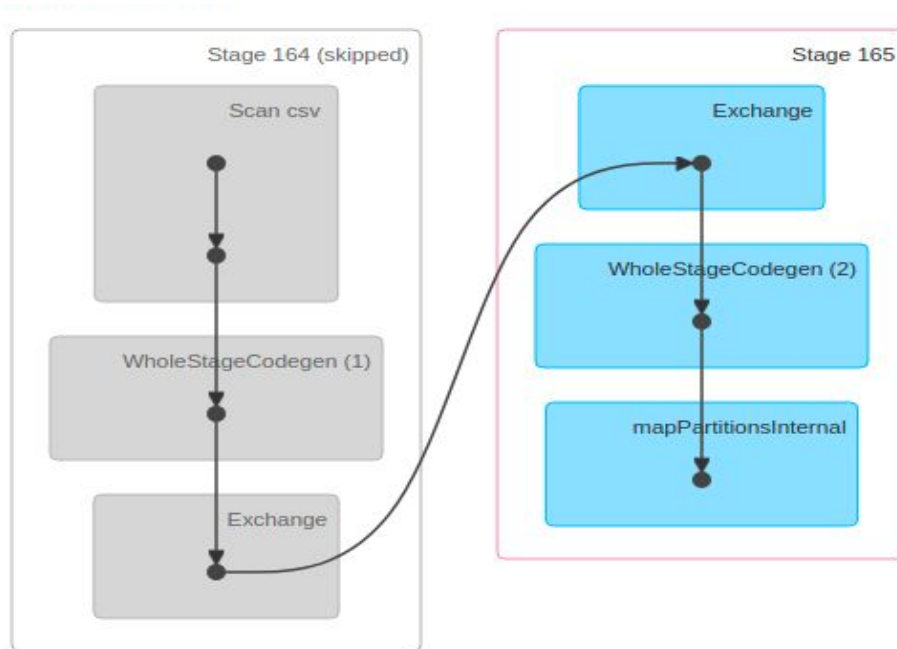
 version 2.4.5

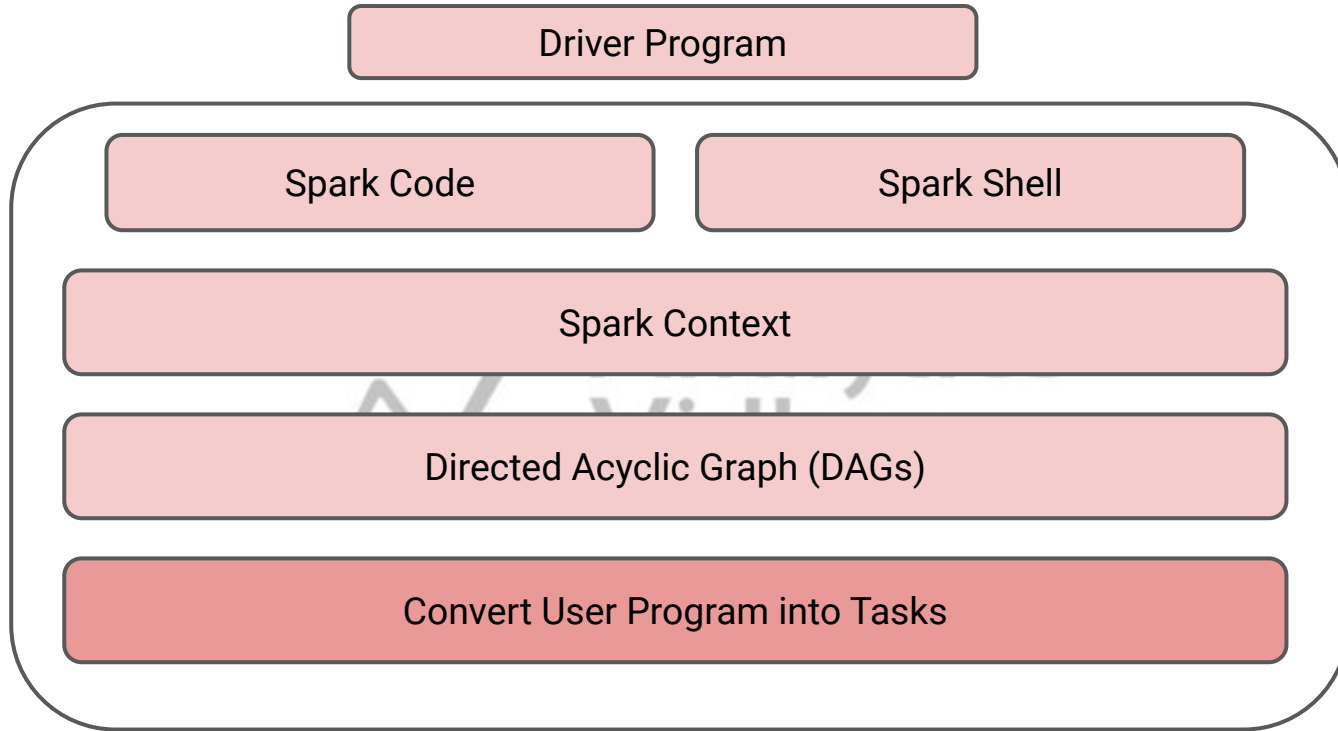
```
Using Scala version 2.11.12 (OpenJDK 64-Bit Server VM, Java 11.0.6)
Type in expressions to have them evaluated.
Type :help for more information.
```

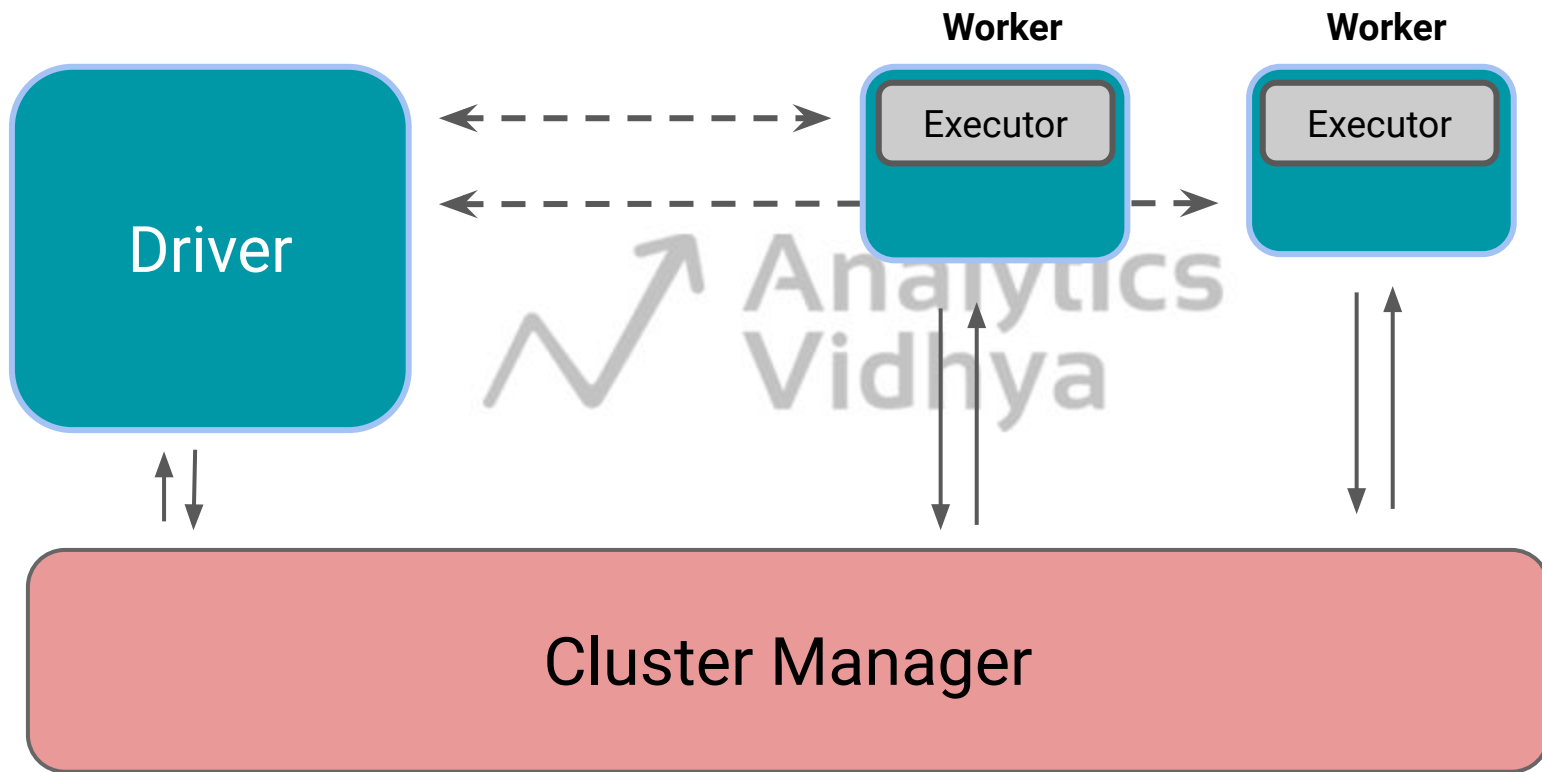
```
scala> 
```

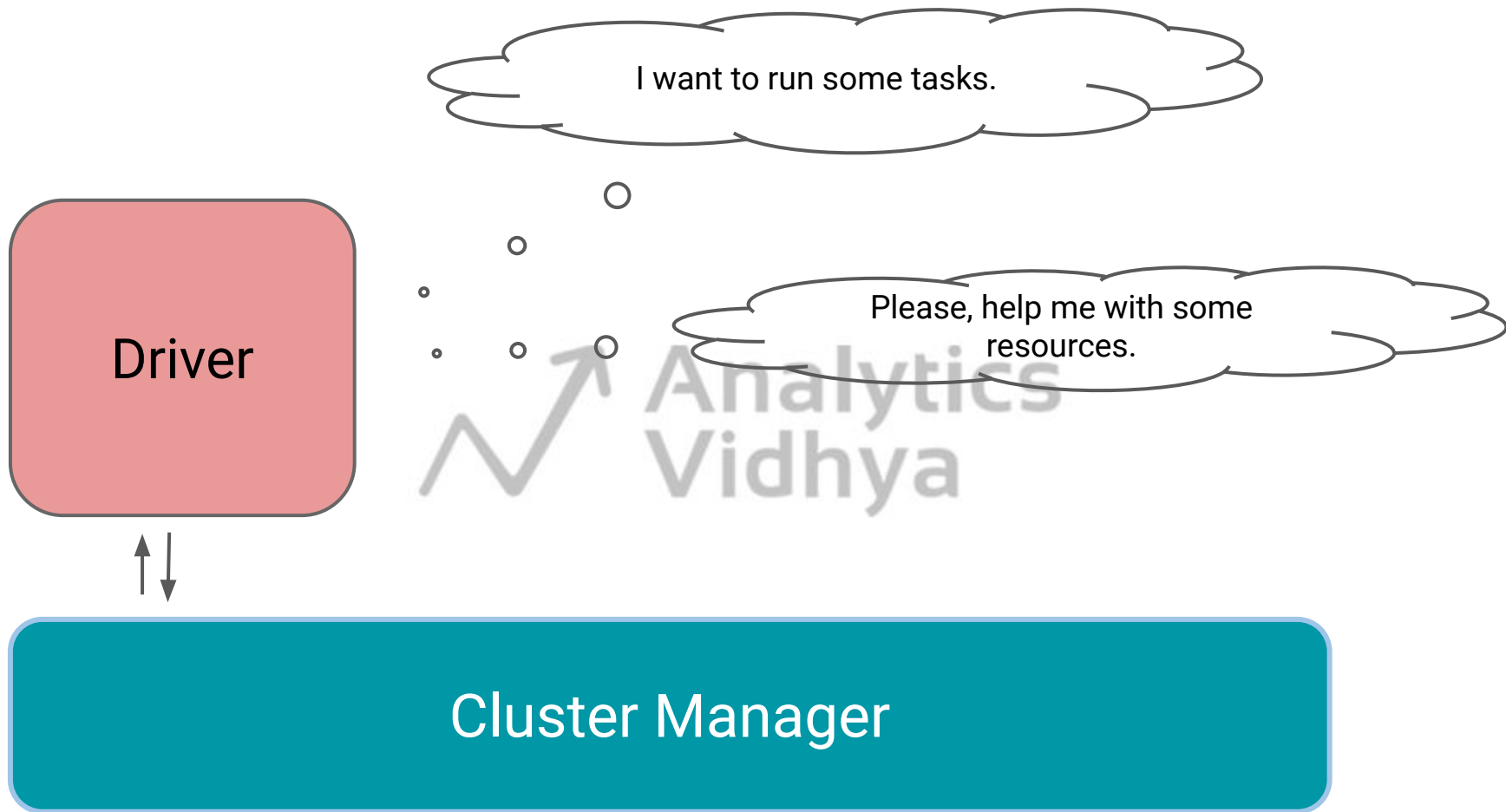


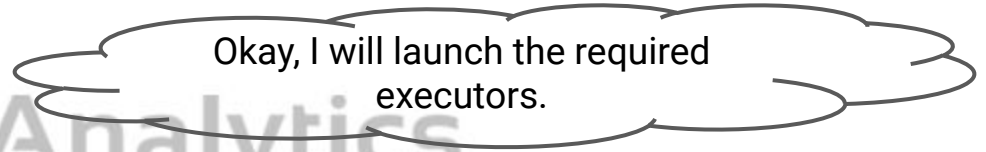
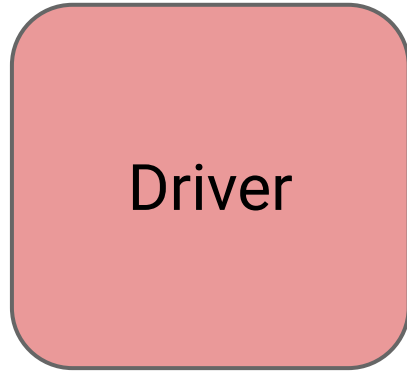
DAG

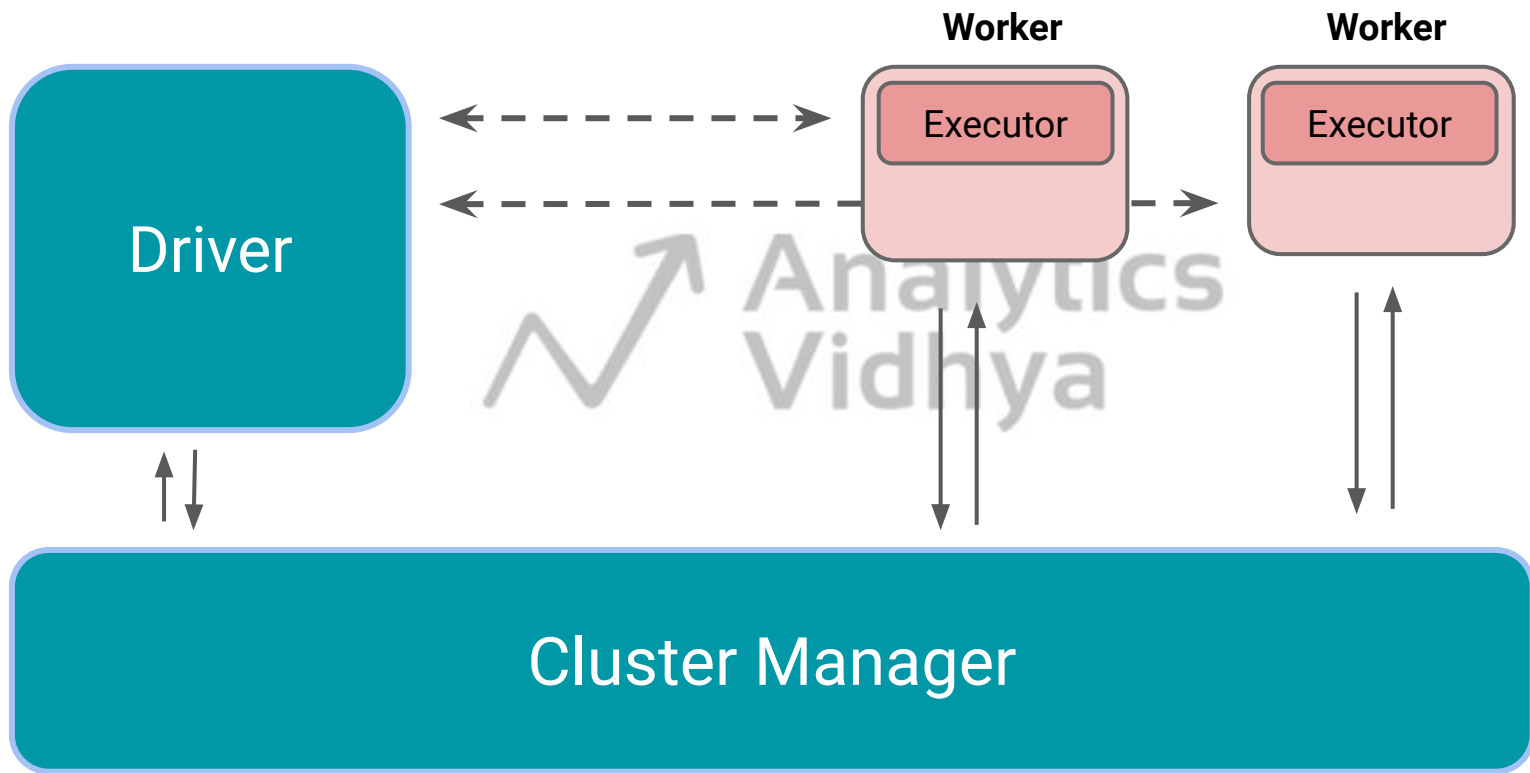




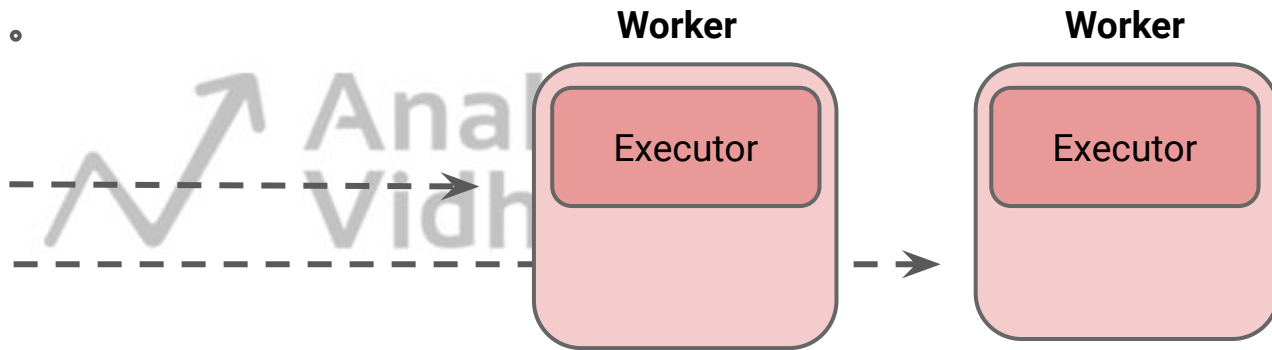


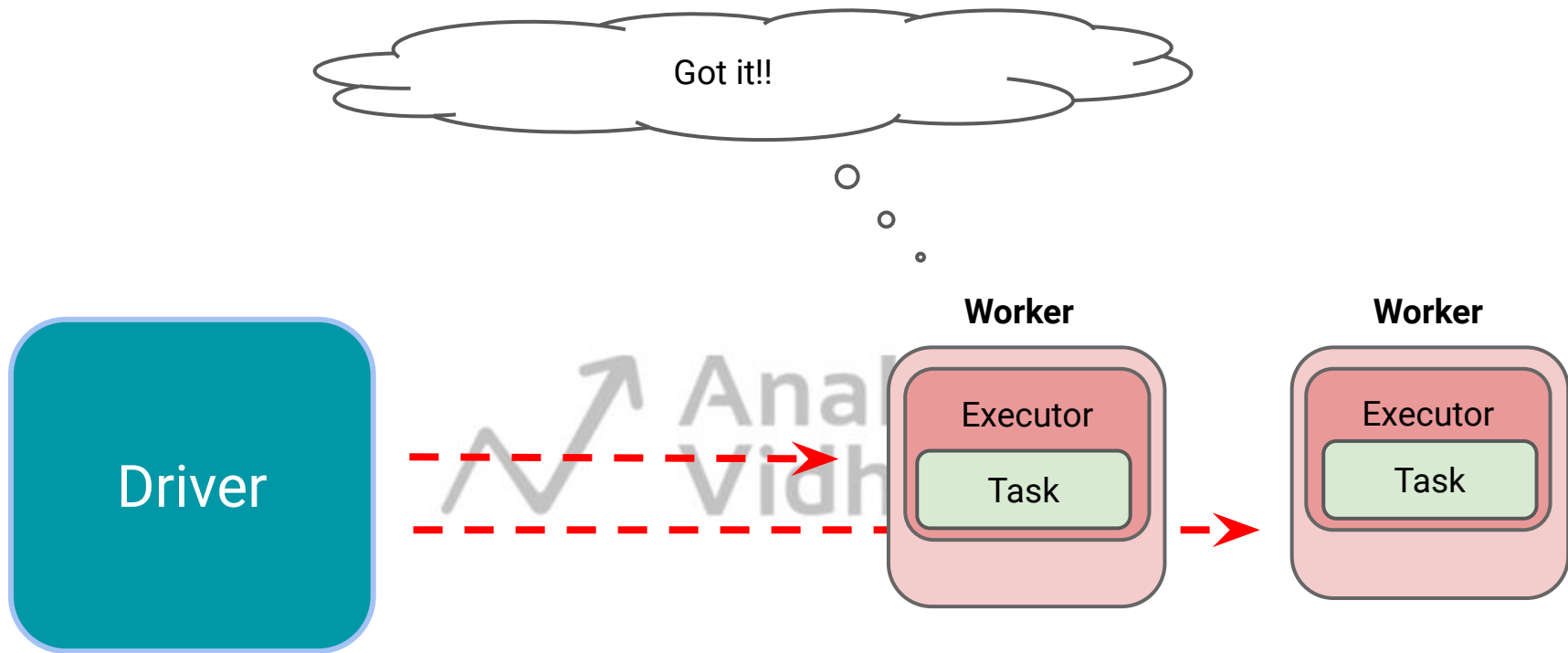


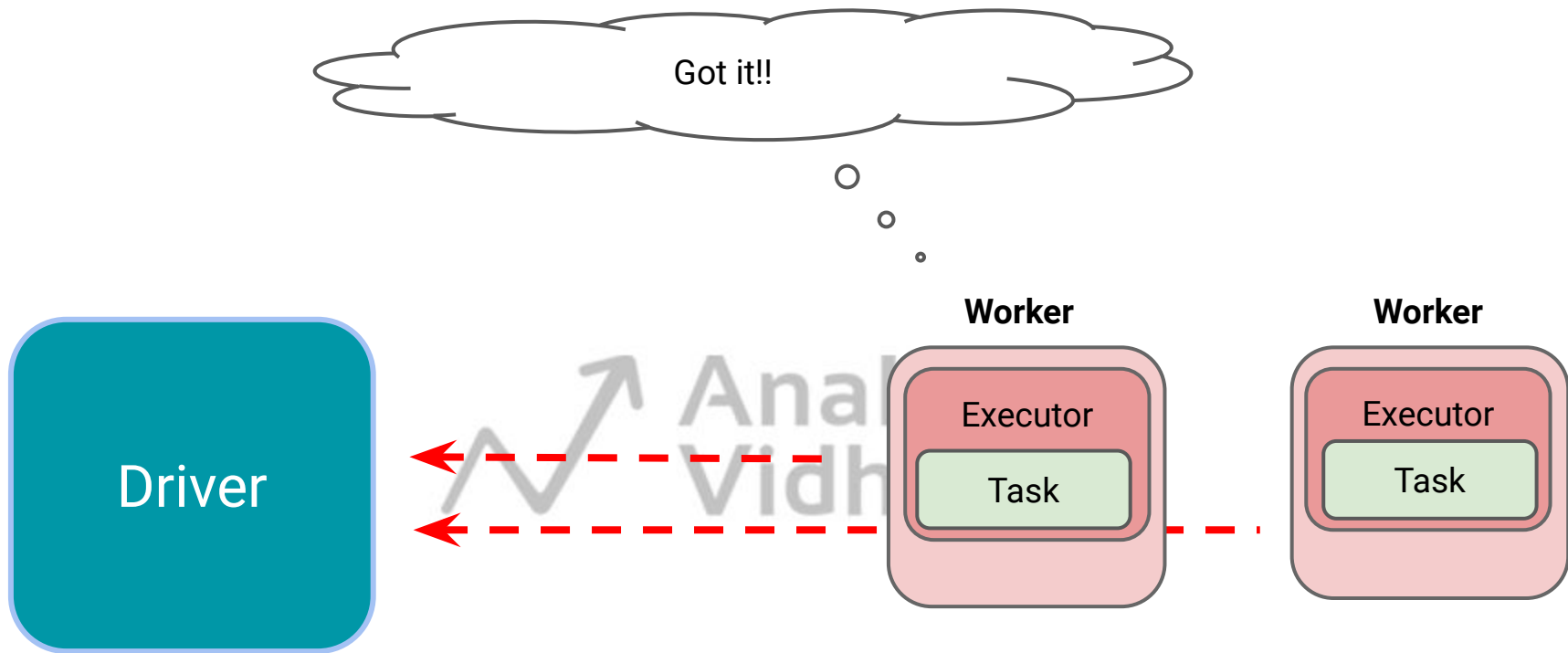




I am allotting some work to you.









Thank You!!