1. Kibana
2. Data visualization
3. features such as histograms, line graphs, pie charts
4. Default choice for elastic search (Default integration)
5. is most often used to analyse the log messages from various data sources, as it operates on Elastic search.
6. Zipkin
7. Service name
8. Trace Id – same across the micro service
9. Span Id – unique for micro service
10. Export Flag
11. Which instance of service is getting down.
12. We cannot go for each service and check log

**Method to implement ELK:**

1. Download Elastic search, Logstash and Kibana of same version.
2. Unzip them.
3. Run Elastic Search- D:\elasticsearch-7.16.2\bin>elasticsearch.bat
4. To check if elastic search is up - <http://localhost:9200/>
5. In kibana change the .yml file to uncomment the elastic search path
6. Run kibana
7. To check if kibana is running -  <http://localhost:5601>
8. Prepare a logstash.conf **[config file](https://www.elastic.co/guide/en/logstash/current/configuration.html)** in bin folder
9. Implement logger in microservice
10. Provide the logger file path in logstash.conf
11. Run logstash - D:\logstash-7.16.2\bin>logstash.bat -f logstash.conf

**To create pattern**

http://localhost:5601/app/management/kibana/indexPatterns

**To see logs**

1. <http://localhost:5601>
2. search – discover

**Method to implement Zipkin**

1. Download “zipkin server 2.10.4”
2. Add sleuth, zipkin dependency
3. Sleuth – generate trace id, span id
4. For 1 request -> trace id will be same irrespective of micro service it is traveling