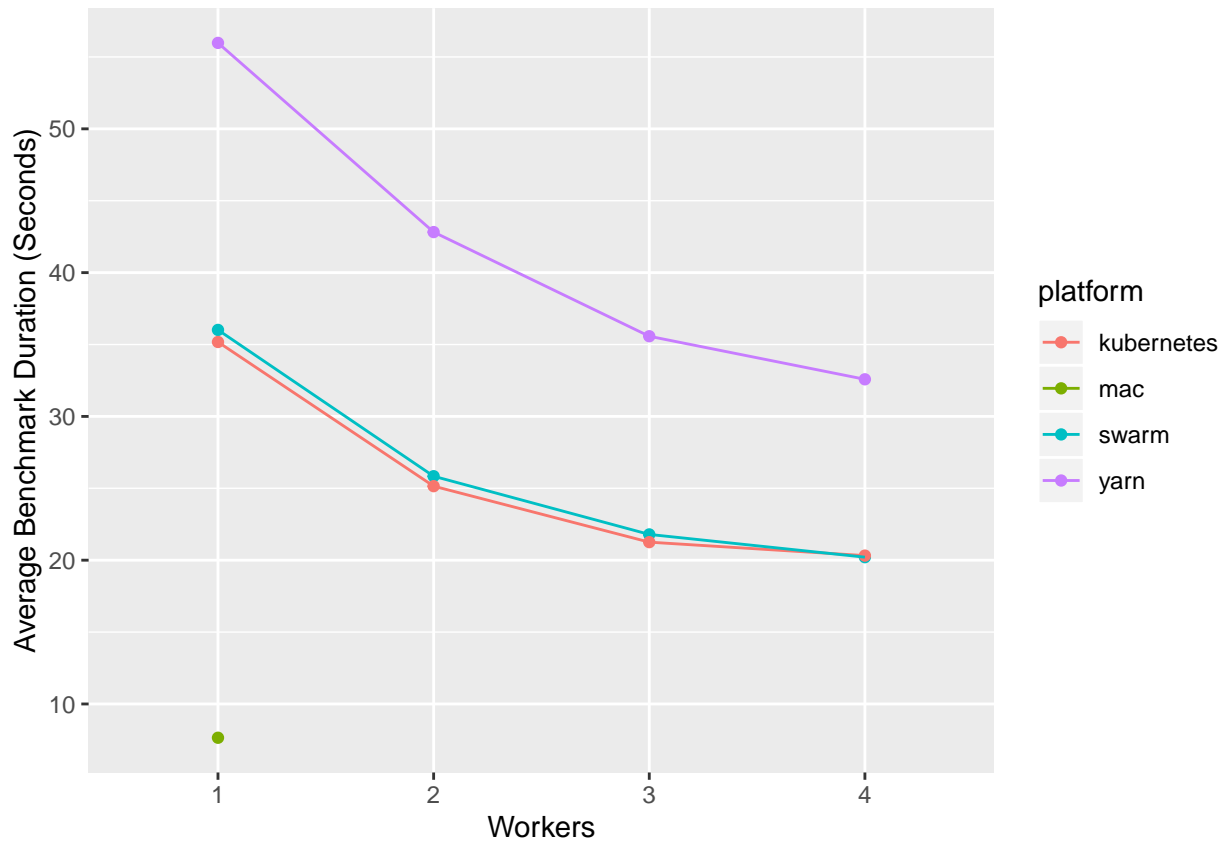
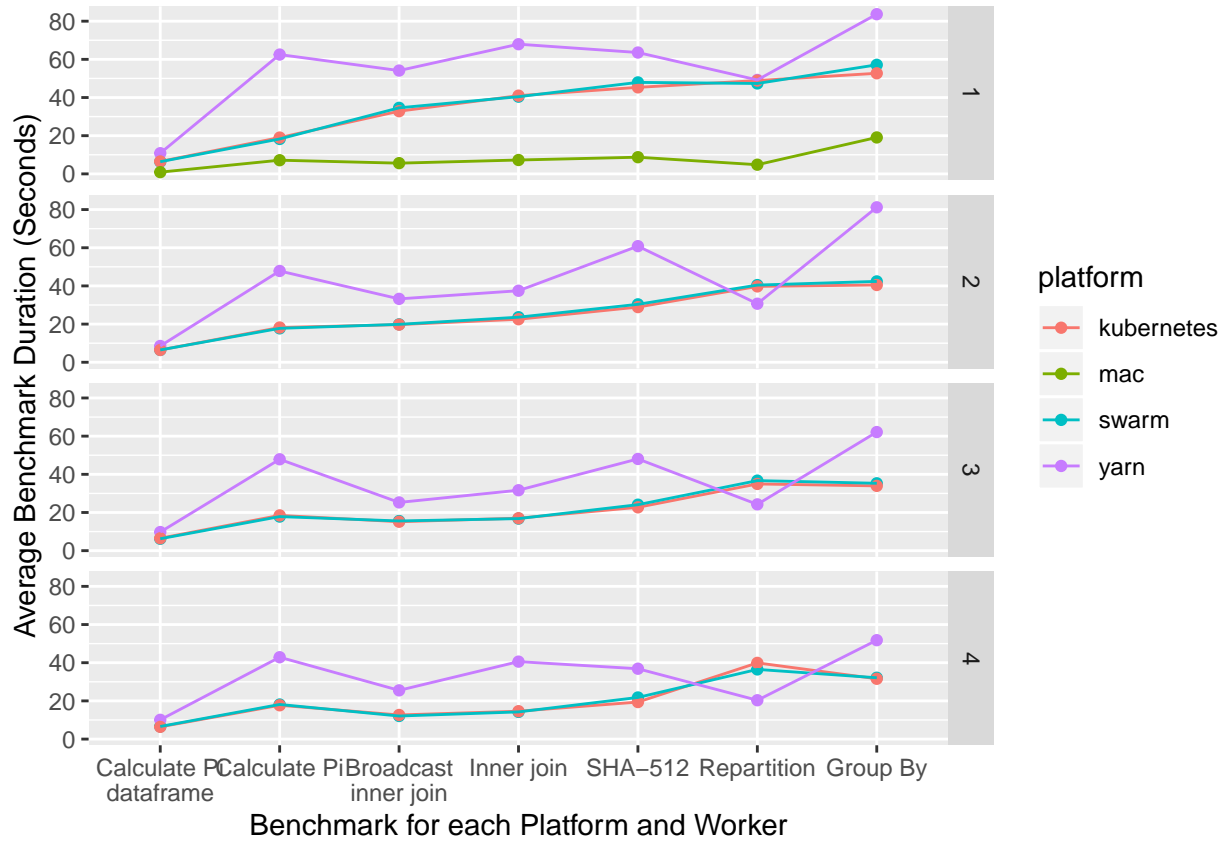


PySpark-Benchmark

```
##  
## Attaching package: 'scales'  
## The following object is masked from 'package:readr':  
##  
##   col_factor
```





##	benchmark	workers	platform	seconds
## 1:	Group By	4	swarm	32.1324053
## 2:	Repartition	4	swarm	36.4957152
## 3:	Inner join	4	swarm	14.2282874
## 4:	Broadcast inner join	4	swarm	12.0840647
## 5:	SHA-512	4	swarm	21.8017089
## 6:	Calculate Pi	4	swarm	18.1279794
## 7:	Calculate Pi dataframe	4	swarm	6.5997477
## 8:	Group By	3	swarm	35.3015223
## 9:	Repartition	3	swarm	36.7002437
## 10:	Inner join	3	swarm	16.7990808
## 11:	Broadcast inner join	3	swarm	15.5609736
## 12:	SHA-512	3	swarm	24.0901705
## 13:	Calculate Pi	3	swarm	17.8599437
## 14:	Calculate Pi dataframe	3	swarm	6.2393394
## 15:	Group By	2	swarm	42.3624745
## 16:	Repartition	2	swarm	40.4418950
## 17:	Inner join	2	swarm	23.6122225
## 18:	Broadcast inner join	2	swarm	19.8661287
## 19:	SHA-512	2	swarm	30.3577006
## 20:	Calculate Pi	2	swarm	17.7695325
## 21:	Calculate Pi dataframe	2	swarm	6.4649885
## 22:	Group By	1	swarm	57.1237157
## 23:	Repartition	1	swarm	47.3591939
## 24:	Inner join	1	swarm	40.4343307
## 25:	Broadcast inner join	1	swarm	34.5995072
## 26:	SHA-512	1	swarm	47.9253133

## 27:	Calculate Pi	1	swarm	18.2861741
## 28:	Calculate Pi dataframe	1	swarm	6.3814731
## 29:	Group By	4	yarn	51.8002683
## 30:	Repartition	4	yarn	20.3426104
## 31:	Inner join	4	yarn	40.5680934
## 32:	Broadcast inner join	4	yarn	25.5235029
## 33:	SHA-512	4	yarn	36.8561395
## 34:	Calculate Pi	4	yarn	42.8807191
## 35:	Calculate Pi dataframe	4	yarn	10.0913443
## 36:	Group By	3	yarn	62.1358084
## 37:	Repartition	3	yarn	24.2559383
## 38:	Inner join	3	yarn	31.6699510
## 39:	Broadcast inner join	3	yarn	25.2771924
## 40:	SHA-512	3	yarn	48.0532618
## 41:	Calculate Pi	3	yarn	47.8791256
## 42:	Calculate Pi dataframe	3	yarn	9.7552129
## 43:	Group By	2	yarn	81.1887893
## 44:	Repartition	2	yarn	30.6774137
## 45:	Inner join	2	yarn	37.4731580
## 46:	Broadcast inner join	2	yarn	33.2136141
## 47:	SHA-512	2	yarn	60.8260476
## 48:	Calculate Pi	2	yarn	47.8318355
## 49:	Calculate Pi dataframe	2	yarn	8.5324283
## 50:	Group By	1	yarn	83.6658797
## 51:	Repartition	1	yarn	49.2184908
## 52:	Inner join	1	yarn	67.9298620
## 53:	Broadcast inner join	1	yarn	54.1222193
## 54:	SHA-512	1	yarn	63.5735157
## 55:	Calculate Pi	1	yarn	62.5054601
## 56:	Calculate Pi dataframe	1	yarn	10.8231742
## 57:	Group By	4	kubernetes	31.5919700
## 58:	Repartition	4	kubernetes	39.9152137
## 59:	Inner join	4	kubernetes	14.5974094
## 60:	Broadcast inner join	4	kubernetes	12.6294408
## 61:	SHA-512	4	kubernetes	19.3906608
## 62:	Calculate Pi	4	kubernetes	17.7059726
## 63:	Calculate Pi dataframe	4	kubernetes	6.4047467
## 64:	Group By	3	kubernetes	33.9513567
## 65:	Repartition	3	kubernetes	34.9555043
## 66:	Inner join	3	kubernetes	17.0088838
## 67:	Broadcast inner join	3	kubernetes	15.1674451
## 68:	SHA-512	3	kubernetes	22.7153051
## 69:	Calculate Pi	3	kubernetes	18.4894181
## 70:	Calculate Pi dataframe	3	kubernetes	6.4985226
## 71:	Group By	2	kubernetes	40.4878643
## 72:	Repartition	2	kubernetes	39.7400768
## 73:	Inner join	2	kubernetes	22.5449391
## 74:	Broadcast inner join	2	kubernetes	19.7157764
## 75:	SHA-512	2	kubernetes	28.9085322
## 76:	Calculate Pi	2	kubernetes	18.2094996
## 77:	Calculate Pi dataframe	2	kubernetes	6.4353475
## 78:	Group By	1	kubernetes	52.6953728
## 79:	Repartition	1	kubernetes	48.8756509
## 80:	Inner join	1	kubernetes	40.9758309

## 81:	Broadcast inner join	1	kubernetes	32.8369509
## 82:	SHA-512	1	kubernetes	45.3269522
## 83:	Calculate Pi	1	kubernetes	19.0186871
## 84:	Calculate Pi dataframe	1	kubernetes	6.5024090
## 85:	Group By	1	mac	19.0837340
## 86:	Repartition	1	mac	4.8080520
## 87:	Inner join	1	mac	7.2605653
## 88:	Broadcast inner join	1	mac	5.6180644
## 89:	SHA-512	1	mac	8.7335966
## 90:	Calculate Pi	1	mac	7.1601150
## 91:	Calculate Pi dataframe	1	mac	0.8973699
##	benchmark workers		platform	seconds