

## InstaCart machinelearning20220527

```
|-- up_cnt: long (nullable = true)
|-- up_reord_cnt: long (nullable = true)
|-- up_no_reord_cnt: long (nullable = true)
|-- up_reordered_avg: double (nullable = false)
|-- up_max_ord_num: integer (nullable = true)
|-- up_min_ord_num: integer (nullable = true)
|-- up_avg_cart: double (nullable = false)
|-- up_avg_prior_days: double (nullable = false)
|-- up_max_prior_days: double (nullable = false)
|-- up_min_prior_days: double (nullable = false)
|-- up_avg_ord_dow: double (nullable = false)
|-- up_avg_ord_hour: double (nullable = false)
|-- up_usr_ratio: double (nullable = false)
|-- up_usr_reord_ratio: double (nullable = false)
|-- up_usr_ord_num_diff: integer (nullable = true)
|-- usr_total_cnt: long (nullable = true)
|-- up_reord_cnt: long (nullable = true)
```

Command took 0.03 seconds -- by kjr5189@gmail.com at 2022. 6. 4. 오전 1:37:59 on

InstaCart  
Cmd 92

# 여러 값으로 구성된 vector 컬럼에서 특정 값만 추출. probability 컬럼은 0/1  
일때의 확률을 모두 가짐. 이중 1일 때(즉 재주문)의 확률을 추출

# 먼저 vector를 array로 변환

```
from pyspark.ml.functions import vector_to_array
predictions = predictions.withColumn("probability_arr",
vector_to_array('probability'))
display(predictions.limit(10))
```

### ▶ (3) Spark Jobs

	user_id ▲	product_id ▲	order_id ▲	up_cnt ▲	up_reord_cnt ▲
1	172302	19822	1243888	1	0
2	1623	43908	1778015	2	1
3	160722	46979	2741763	11	10
4	137485	21903	1392405	5	4