

COVID-19

APACHE PIG WEEKLY
PROJECT

HOKAGE HEROES

QUESTION 1

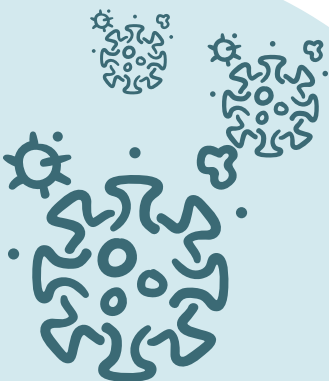
Do you have a covid-19?

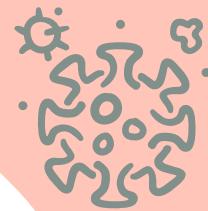
CODE

```
1 Load_data = LOAD '/user/maria_dev/Covie_19/Covid_df.txt'  
2 USING PigStorage(',') as (USMER:int,MEDICAL_UNIT:int,SEX:int,PATIENT_TYPE:chararray,PNEUMONIA:int,  
3 AGE:int,PREGNANT:int,DIABETES:int,COPD:int,ASTHMA:int,INMSUPR:int,HIPERTENSION:int,OTHER_DISEASE:int,  
4 CARDIOVASCULAR:int,OBESITY:int,RENAL_CHRONIC:int,TOBACCO:int,CLASIFFICATION_FINAL:int,DEATH:int);  
5 data_foreach = FOREACH Load_data GENERATE MEDICAL_UNIT,SEX,PATIENT_TYPE,AGE,CLASIFFICATION_FINAL;  
6 positive_test = FILTER data_foreach BY CLASIFFICATION_FINAL<=3 ;
```

SCREENSHOT

▼ Results
(12,1,1,59,1)
(12,1,1,40,1)
(12,1,1,38,1)
(12,2,1,68,1)
(12,2,1,23,1)
(12,1,1,40,1)
(12,1,1,25,1)
(12,1,1,51,1)
(12,1,1,41,1)
(12,1,1,50,1)
(12,2,1,33,1)
(12,1,1,40,1)
(12,2,1,64,1)





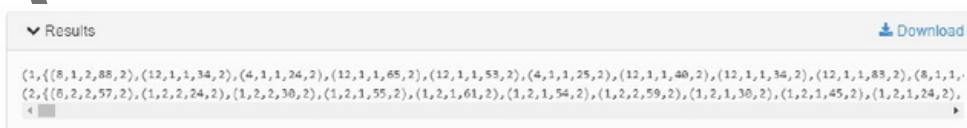
QUESTION2

Are they still in life?

CODE

```
1 Load_data = LOAD '/user/maria_dev/Covie_19/Covid_df.txt'
2 USING PigStorage(',') as (USMER:int,MEDICAL_UNIT:int,SEX:int,PATIENT_TYPE:chararray,
3 PNEUMONIA:int,AGE:int,PREGNANT:int,DIABETES:int,COPD:int,ASTHMA:int,INMSUPR:int,
4 HIPERTENSION:int,OTHER_DISEASE:int,CARDIOVASCULAR:int,OBESITY:int,RENAL_CHRONIC:int,
5 TOBACCO:int,CLASIFFICATION_FINAL:int,DEATH:int);
6 data_foreach = FOREACH Load_data GENERATE MEDICAL_UNIT,SEX,PATIENT_TYPE,AGE,DEATH ;
7 ifstill_alive= FILTER data_foreach BY DEATH ==2;
8 G_sex= GROUP ifstill_alive BY SEX;
9 DUMP G_sex;
```

SCREENSHOT



QUESTION 3

Does anybody from them have diabetes?

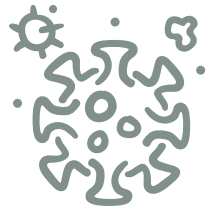
CODE

```
1 Load_data = LOAD '/user/maria_dev/Covie_19/Covid_df.txt'
2 USING PigStorage(',') as (USMER:int,MEDICAL_UNIT:int,SEX:int,PATIENT_TYPE:chararray,
3 PNEUMONIA:int,AGE:int,PREGNANT:int,DIABETES:int,COPD:int,ASTHMA:int,INMSUPR:int,
4 HIPERTENSION:int,OTHER_DISEASE:int,CARDIOVASCULAR:int,OBESITY:int,RENAL_CHRONIC:int,
5 TOBACCO:int,CLASIFFICATION_FINAL:int,DEATH:int);
6 data_foreach = FOREACH Load_data GENERATE SEX,PATIENT_TYPE,AGE,DIABETES;
7 has_diabete= FILTER data_foreach BY DIABETES == 1;
8 DUMP has_diabete;
```

SCREENSHOT

▼ Results
(2,2,55,1)
(2,1,68,1)
(1,1,64,1)
(1,2,37,1)
(1,1,48,1)
(2,2,59,1)
(1,1,57,1)
(1,2,48,1)
(2,2,30,1)
(2,1,62,1)
(2,1,56,1)
(1,1,53,1)
(1,1,60,1)
(1,1,47,1)
(1,1,53,1)

QUESTION 4



Does anybody from them have blood pressure?

CODE

```
1 Load_data = LOAD '/user/maria_dev/Covie_19/Covid_df.txt'
2 USING PigStorage(',') as (USMER:int,MEDICAL_UNIT:int,SEX:int,PATIENT_TYPE:chararray,
3 PNEUMONIA:int,AGE:int,PREGNANT:int,DIABETES:int,COPD:int,ASTHMA:int,INMSUPR:int,
4 HIPERTENSION:int,OTHER_DISEASE:int,CARDIOVASCULAR:int,OBESITY:int,RENAL_CHRONIC:int,
5 TOBACCO:int,CLASIFFICATION_FINAL:int,DEATH:int);
6 data_foreach = FOREACH Load_data GENERATE AGE,HIPERTENSION,CLASIFFICATION_FINAL;
7 has_bloodPressure= FILTER data_foreach BY HIPERTENSION == 1;
8 age= FILTER has_bloodPressure by AGE > 50;
9 DUMP age;
```

SCREENSHOT

▼ Results

(65,1,3)
(72,1,5)
(68,1,3)
(64,1,3)
(80,1,3)
(62,1,7)
(58,1,7)
(66,1,7)
(56,1,7)
(66,1,7)
(80,1,7)
(53,1,3)
(62,1,7)
(53,1,7)

QUESTION5

Do you have another disease?

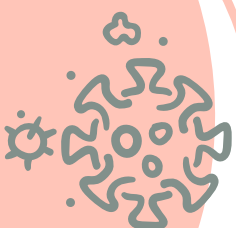
CODE

```
1 Load_data = LOAD '/user/maria_dev/CovidProject/Covid_df.txt'
2 USING PigStorage(',') as (USMR:int,MEDICAL_UNIT:int,SEX:int,PATIENT_TYPE:chararray,
3 PNEUMONIA:int,AGE:int,PREGNANT:int,DIABETES:int,COPD:int,ASTHMA:int,INMSUPR:int,HIPERTENSION:int,
4 OTHER_DISEASE:int,CARDIOVASCULAR:int,OBESITY:int,RENAL_CHRONIC:int,TOBACCO:int,CLASIFFICATION_FINAL:int,DEATH:int);
5 data_foreach = FOREACH Load_data GENERATE MEDICAL_UNIT,SEX,AGE,CLASIFFICATION_FINAL,OTHER_DISEASE;
6 other = FILTER data_foreach BY OTHER_DISEASE == 1 ;
7 DUMP other;
```

SCREENSHOT

▼ Results

```
(1,2,47,3,1)
(1,1,30,7,1)
(2,1,10,3,1)
(2,2,1,7,1)
(2,1,15,7,1)
(2,1,2,7,1)
(2,1,10,7,1)
(3,1,64,7,1)
(3,1,49,5,1)
(3,1,49,7,1)
(3,2,63,5,1)
(3,2,79,3,1)
(3,1,74,3,1)
(3,2,77,5,1)
(3,1,83,7,1)
(3,2,60,7,1)
(3,2,55,3,1)
```



QUESTION 6

Does anybody from them have COPD and ASTHMA?

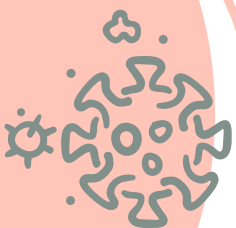
CODE

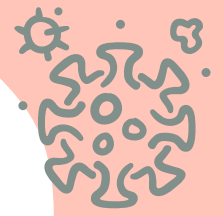
```
1 Load_data = LOAD '/user/maria_dev/Covie_19/Covid_df.txt'
2 USING PigStorage(',') as (USMER:int,MEDICAL_UNIT:int,SEX:int,PATIENT_TYPE:chararray,
3 PNEUMONIA:int,AGE:int,PREGNANT:int,DIABETES:int,COPD:int,ASTHMA:int,INMSUPR:int,
4 HIPERTENSION:int,OTHER_DISEASE:int,CARDIOVASCULAR:int,OBESITY:int,RENAL_CHRONIC:int,
5 TOBACCO:int,CLASIFFICATION_FINAL:int,DEATH:int);
6 data_foreach = FOREACH Load_data GENERATE PATIENT_TYPE,AGE,COPD,ASTHMA,DEATH;
7 has_copd= FILTER data_foreach BY COPD == 1;
8 has_ASTHMA= FILTER has_copd BY ASTHMA == 1;
```

SCREENSHOT

▼ Results

(2,82,1,1,1)
(2,81,1,1,1)
(2,84,1,1,1)
(2,55,1,1,1)
(2,69,1,1,1)
(2,55,1,1,1)
(2,42,1,1,1)
(2,47,1,1,1)
(2,75,1,1,1)
(2,65,1,1,1)
(2,54,1,1,1)
(2,64,1,1,1)





QUESTION 7

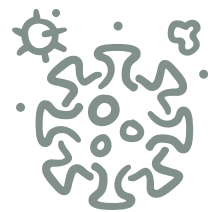
Does anybody from them have been recovered from COVID-19 while the age is under 40 and has a ASTHMA?

CODE

```
1 Load_data = LOAD '/user/maria_dev/Covie_19/Covid_df.txt'  
2 USING PigStorage(',') as (USMER:int,MEDICAL_UNIT:int,SEX:int,PATIENT_TYPE:chararray,  
3 PNEUMONIA:int,AGE:int,PREGNANT:int,DIABETES:int,COPD:int,ASTHMA:int,INMSUPR:int,  
4 HIPERTENSION:int,OTHER_DISEASE:int,CARDIOVASCULAR:int,OBESITY:int,RENAL_CHRONIC:int,  
5 TOBACCO:int,CLASIFFICATION_FINAL:int,DEATH:int);  
6 data_foreach = FOREACH Load_data GENERATE AGE,ASTHMA,DEATH ;  
7 has_asthma= FILTER data_foreach BY ASTHMA == 1;  
8 is_recovered= FILTER has_asthma BY DEATH == 2;  
9 filterPatient = FILTER is_recovered BY AGE < 40;  
10 DUMP filterPatient;
```

SCREENSHOT

▼ Results
(25,1,2)
(24,1,2)
(8,1,2)
(13,1,2)
(17,1,2)
(27,1,2)
(38,1,2)
(39,1,2)
(26,1,2)
(36,1,2)
(39,1,2)
(36,1,2)
(35,1,2)



QUESTION 8

For the women

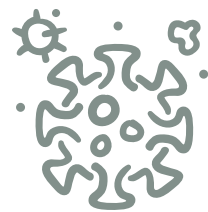
CODE

```
1 Load_data = LOAD '/user/maria_dev/Covie_19/Covid_df.txt'
2 USING PigStorage(',') as (USMER:int,MEDICAL_UNIT:int,SEX:int,PATIENT_TYPE:chararray,
3 PNEUMONIA:int,AGE:int,PREGNANT:int,DIABETES:int,COPD:int,ASTHMA:int,INMSUPR:int,
4 HIPERTENSION:int,OTHER_DISEASE:int,CARDIOVASCULAR:int,OBESITY:int,RENAL_CHRONIC:int,
5 TOBACCO:int,CLASIFFICATION_FINAL:int,DEATH:int);
6 data_foreach = FOREACH Load_data GENERATE SEX,PREGNANT,AGE,CLASIFFICATION_FINAL;
7 she_female= FILTER data_foreach BY SEX == 1;
8 has_PREGNANT= FILTER she_female BY PREGNANT == 1;
9 has_corona= FILTER has_PREGNANT BY CLASIFFICATION_FINAL <= 3;
10 DUMP has_corona;
```

SCREENSHOT

▼ Results

```
(1,1,23,3)
(1,1,30,3)
(1,1,33,3)
(1,1,57,1)
(1,1,25,1)
(1,1,26,3)
(1,1,25,3)
(1,1,34,3)
(1,1,34,3)
(1,1,22,3)
(1,1,30,3)
(1,1,24,3)
(1,1,27,3)
(1,1,30,3)
(1,1,25,3)
(1,1,34,3)
```



QUESTION 9

Are they smoke?

CODE

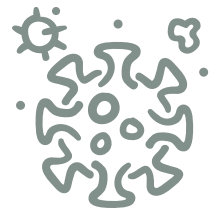
```
1 Load_data = LOAD '/user/maria_dev/CovidProject/Covid_df.txt'
2 USING PigStorage(',') as (USHER:int,MEDICAL_UNIT:int,SEX:int,PATIENT_TYPE:chararray,
3 PNEUMONIA:int,AGE:int,PREGNANT:int,DIABETES:int,COPO:int,ASTHMA:int,INMSUPR:int,HIPERTENSION:int,
4 OTHER_DISEASE:int,CARDIOVASCULAR:int,OBESITY:int,RENAL_CHRONIC:int,TOBACCO:int,CLASIFFICATION_FINAL:int,DEATH:int);
5 data_foreach = FOREACH Load_data GENERATE MEDICAL_UNIT,SEX,PATIENT_TYPE,AGE,TOBACCO,CLASIFFICATION_FINAL;
6 positive_test = FILTER data_foreach BY CLASIFFICATION_FINAL<=3 ;
7 smooking= FILTER positive_test BY TOBACCO == 1;
8 gender_group= group smooking by SEX ;
9 DUMP gender_group;
```

SCREENSHOT

▼ Results [Download](#)

```
(2, {(12,1,1,72,1,3),(4,1,1,27,1,3),(4,1,1,26,1,3),(6,1,1,70,1,3),(4,1,1,46,1,3),(4,1,2,61,1,3),(12,1,1,32,1,3),(12,1,1,80,1,3),(4,1,2,58,1,3),(12,1,1,34,1,3),(12,1,1,57,1,3),(4,1,2,56,1,3),(4,1,2,59,1,3),(1,2,1,39,1,3),(3,2,2,43,1,3),(3,2,2,86,1,3),(3,2,2,74,1,3),(3,2,2,53,1,3),(3,2,2,57,1,3),(3,2,2,68,1,3),(3,2,2,65,1,3),(3,2,2,56,1,3),(3,2,2,69,1,3),(3,2,2,72,1,3),(3,2,1,53,1,3)})
```

QUESTION 10



Does anybody set in a hospital during covid-19 affected?

CODE

```
1 Load_data = LOAD '/user/maria_dev/CovidProject/Covid_df.txt'
2 USING PigStorage(',') as (USMER:int,MEDICAL_UNIT:int,SEX:int,PATIENT_TYPE:chararray,
3 PNEUMONIA:int,AGE:int,PREGNANT:int,DIABETES:int,COPD:int,ASTHMA:int,INMSUPR:int,HIPERTENSION:int,
4 OTHER_DISEASE:int,CARDIOVASCULAR:int,OBESITY:int,RENAL_CHRONIC:int,TOBACCO:int,CLASIFFICATION_FINAL:int,DEATH:int);
5 data_foreach = FOREACH Load_data GENERATE MEDICAL_UNIT,SEX,PATIENT_TYPE,AGE,CLASIFFICATION_FINAL;
6 positive_test = FILTER data_foreach BY CLASIFFICATION_FINAL<=3 ;
7 patient_type= FILTER positive_test BY PATIENT_TYPE matches '1' ;
8 DUMP patient_type;
```

SCREENSHOT

▼ Results

```
(1,1,1,65,3)
(1,2,1,68,3)
(1,1,1,64,3)
(1,1,1,64,3)
(1,1,1,38,3)
(1,2,1,55,3)
(1,1,1,48,3)
(1,1,1,23,3)
(1,2,1,61,3)
(1,2,1,54,3)
(1,2,1,30,3)
(1,2,1,45,3)
(1,1,1,26,3)
(1,1,1,38,3)
(1,2,1,24,3)
(1,2,1,32,3)
(1,2,1,49,3)
```

THANKS!

Done by:

- Razan Alajlan
- Shouq Alharbi
- Sarah Alrashidi
- Nada Oteif
- Hayam Alrashed

