Develop a program to calculate the following for weather dataset using Pig Latin: a. Load the entire file of wether.txt and name it records. b. Filter the records by temperature! = 9999 AND quality IN (0, 1, 4, 5, 9). c. Grouping the records. d. Finding the maximum temperature. Weather dataset with year temperature and quality as columns

```
cd Desktop
cd exp8
pig -x local

-- a. Load the entire file 'weather.txt'
records = LOAD 'weather.txt' USING PigStorage(',') AS (date:chararray, temperature:int,
quality:int);

-- b. Filter the records where temperature != 9999 AND quality IN (0, 1, 4, 5, 9).
filtered_records = FILTER records BY (temperature != 9999 AND (quality == 0 OR quality == 1
OR quality == 4 OR quality == 5 OR quality == 9));
Dump filtered_records;

-- c. Group the records by date
grouped_records = GROUP filtered_records BY date;
Dump grouped_records;

-- d. Find the maximum temperature for each group (date)
max_temperature = FOREACH grouped_records GENERATE group AS date,
MAX(filtered_records.temperature) AS max_temp;

-- Output the result
DUMP max_temperature;
```