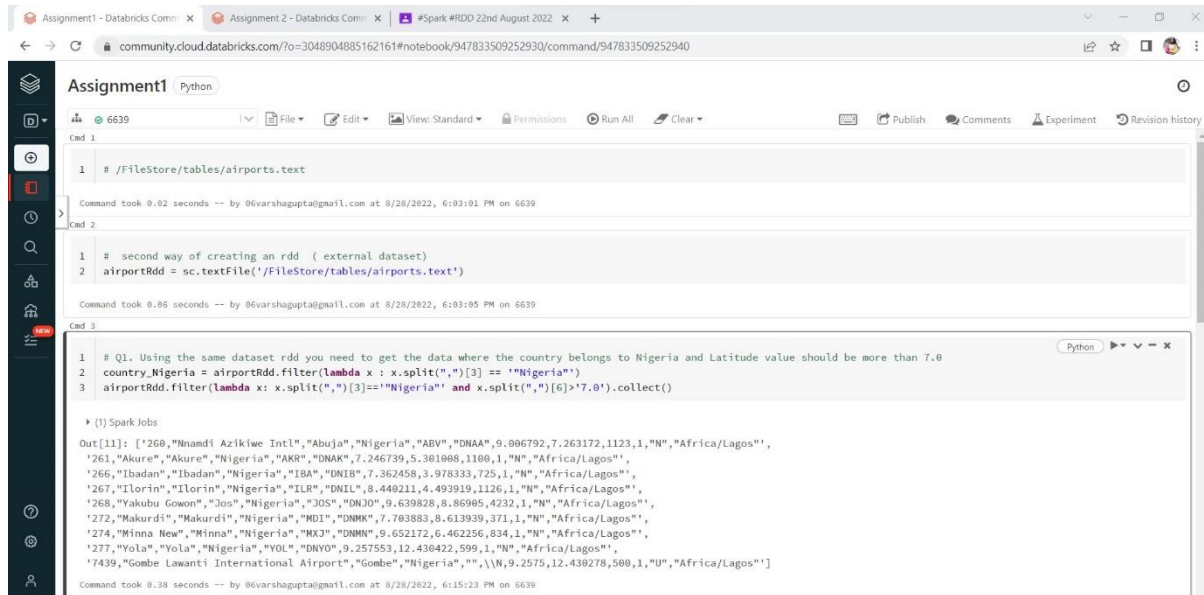


Task-18

Name: Varsha Gupta

Referral id: DIRSS3129

Q1. Using the same dataset rdd you need to get the data where the country belongs to Nigeria and Latitude value should be more than 7.0 (here the 7.0 should be only and only float type in filter)



```
1 # /FileStore/tables/airports.text

Command took 0.82 seconds -- by 06varshagupta@gmail.com at 8/28/2022, 6:03:01 PM on 6639

2 # second way of creating an rdd ( external dataset)
2 airportRdd = sc.textFile('/FileStore/tables/airports.text')

Command took 0.86 seconds -- by 06varshagupta@gmail.com at 8/28/2022, 6:03:05 PM on 6639

3 # Q1. Using the same dataset rdd you need to get the data where the country belongs to Nigeria and Latitude value should be more than 7.0
2 country_Nigeria = airportRdd.filter(lambda x : x.split(",")[3] == "Nigeria")
3 airportRdd.filter(lambda x: x.split(",")[3]=="Nigeria" and x.split(",")[6]>7.0).collect()

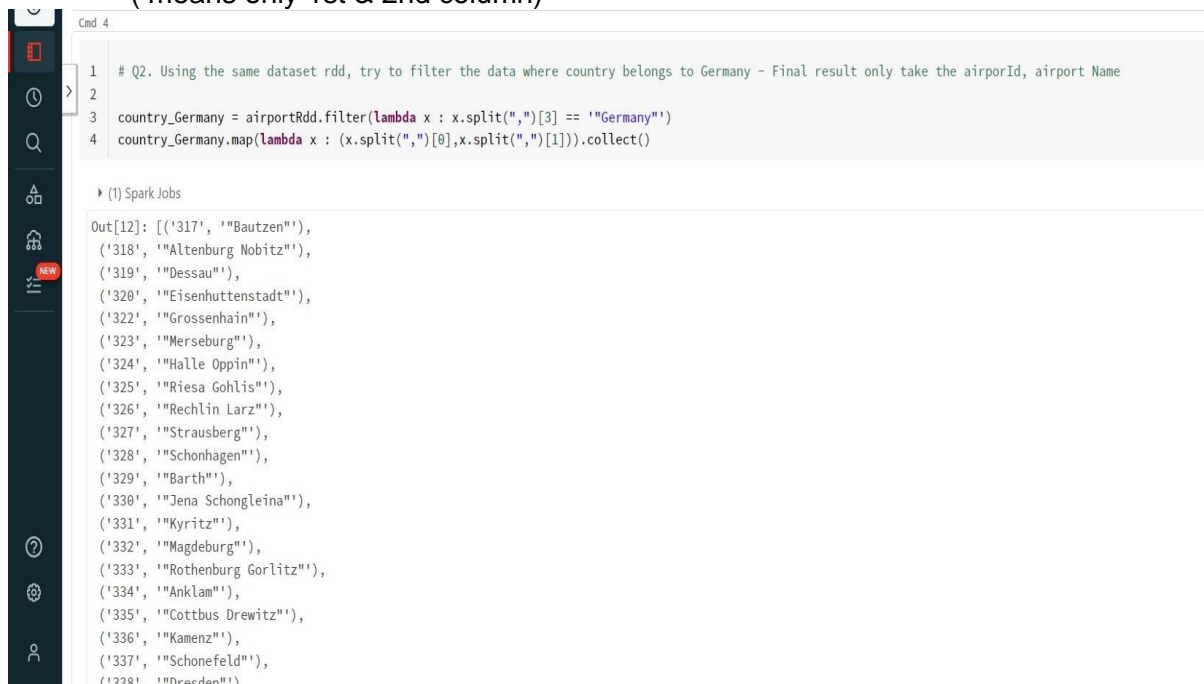
Python ▶ ▾ ▹ ▸ ✕

▶ (1) Spark Jobs

Out[11]: ['260','Nnamdi Azikiwe Intl','Abuja','Nigeria','ABV','DNAA',9.096792,7.263172,1123,1,'N','Africa/Lagos',
'261','Akure','Akure','Nigeria','AKR','DNAK',7.246739,5.381088,1100,1,'N','Africa/Lagos',
'266','Ibadan','Ibadan','Nigeria','IBA','DNIB',7.362458,3.978333,725,1,'N','Africa/Lagos',
'267','Ilorin','Ilorin','Nigeria','ILR','DNIL',8.440211,4.493919,1126,1,'N','Africa/Lagos',
'268','Yakubu Gowon','Jos','Nigeria','JOS','DNJO',9.639828,8.86985,4232,1,'N','Africa/Lagos',
'272','Makurdi','Makurdi','Nigeria','MDI','DNMK',7.783883,8.613939,371,1,'N','Africa/Lagos',
'274','Mina New','Mina','Nigeria','MXJ','DNMN',9.652172,6.462256,834,1,'N','Africa/Lagos',
'277','Yola','Yola','Nigeria','VOL','DNVO',9.257553,12.436422,599,1,'N','Africa/Lagos',
'7439','Gombe Lawanti International Airport','Gombe','Nigeria','','\\N',9.2575,12.430278,500,1,'U','Africa/Lagos']

Command took 0.38 seconds -- by 06varshagupta@gmail.com at 8/28/2022, 6:15:23 PM on 6639
```

Q2. Using the same dataset rdd, try to filter the data where country belongs to Germany - Final result only take the airportId, airport Name (means only 1st & 2nd column)



```
1 # Q2. Using the same dataset rdd, try to filter the data where country belongs to Germany - Final result only take the airportId, airport Name
2
3 country_Germany = airportRdd.filter(lambda x : x.split(",")[3] == "Germany")
4 country_Germany.map(lambda x : (x.split(",")[0],x.split(",")[1])).collect()

Python ▶ ▾ ▹ ▸ ✕

▶ (1) Spark Jobs

Out[12]: [('317', 'Bautzen'),
('318', 'Altenburg Nobitz'),
('319', 'Dessau'),
('320', 'Eisenhüttenstadt'),
('322', 'Grossenhain'),
('323', 'Merseburg'),
('324', 'Halle Oppin'),
('325', 'Riesa Gohlis'),
('326', 'Rechlin Larz'),
('327', 'Strausberg'),
('328', 'Schonhausen'),
('329', 'Barth'),
('330', 'Jena Schöngleina'),
('331', 'Kyritz'),
('332', 'Magdeburg'),
('333', 'Rothenburg Gölitz'),
('334', 'Anklam'),
('335', 'Cottbus Drewitz'),
('336', 'Kamenz'),
('337', 'Schönefeld'),
('338', 'Dresden'),
```

('339', '"Erfurt"'),
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('341', '"Munster Osnabruck"'),
('342', '"Hamburg"'),
('343', '"Tempelhof"'),
('344', '"Koln Bonn"'),
('345', '"Dusseldorf"'),
('346', '"Franz Josef Strauss"'),
('347', '"Nurnberg"'),
('348', '"Leipzig Halle"'),
('349', '"Saarbrucken"'),
('350', '"Stuttgart"'),
('351', '"Tegel"'),
('352', '"Hannover"'),
('353', '"Neuenland"'),
('354', '"Egelsbach"'),
('355', '"Frankfurt Hahn"'),
('356', '"Mannheim City"'),
('357', '"Allendorf Eder"'),
('358', '"Worms"'),
('359', '"Mainz Finthen"').
('360', '"Eisenach Kindel"'),
('361', '"Siegerland"'),
('362', '"Hamburg Finkenwerder"'),
('363', '"Kiel Holtenau"'),
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('366', '"Meinerzhagen"'),
('367', '"Arnsberg Menden"'),
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('371', '"Paderborn Lippstadt"'),
('372', '"Stadtlohn Vreden"'),
('373', '"Dortmund"'),
('374', '"Augsburg"'),
('375', '"Biberach An Der Riss"'),
('376', '"Eggenfelden"'),
('377', '"Mindelheim Mattsies"'),
('378', '"Oberpfaffenhofen"'),
('379', '"Straubing"'),
('380', '"Vilshofen"'),

('381', '"Leutkirch Unterzeil"'),
('382', '"Friedrichshafen"'),
('383', '"Schwerin Parchim"'),
('384', '"Stendal Borstel"'),
('385', '"Aalen Heidenheim Elchingen"'),
('386', '"Bayreuth"'),
('387', '"Burg Feuerstein"'),
('388', '"Hof Plauen"'),
('389', '"Hassfurt Schweinfurt"'),
('390', '"Koblenz Winingen"'),
('391', '"Trier Fohren"'),
('392', '"Speyer"'),
('393', '"Zweibrucken"'),
('394', '"Donaueschingen Villingen"'),
('395', '"Freiburg"'),
('396', '"Mengen Hohentengen"'),
('397', '"Schwabisch Hall"'),
('398', '"Finsterwalde Schacksdorf"'),
('399', '"Braunschweig Wolfsburg"'),
('400', '"Kassel Calden"'),
('401', '"Hildesheim"'),

('402', '"Bremerhaven"'),
('403', '"Emden"'),
('404', '"Leer Papenburg"'),
('405', '"Wilhelmshaven Mariensiel"'),
('406', '"Borkum"'),
('407', '"Norderney"'),
('408', '"Flensburg Schaferhaus"'),
('409', '"Rendsburg Schachtholm"'),
('410', '"Westerland Sylt"'),
('750', '"Spangdahlem Ab"'),
('751', '"Ramstein Ab"'),
('752', '"Bamberg Aaf"'),
('753', '"Giebelstadt Aaf"'),
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('755', '"Celle"'),
('756', '"Rheine Bentlage"'),
('757', '"Fritzlar"'),
('758', '"Laupheim"'),
('759', '"Mendig"'),
('760', '"Niederstetten"'),
('761', '"Roth"'),

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('766', '"Kitzingen Aaf"'),
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('768', '"Diepholz"'),
('769', '"Geilenkirchen"'),
('770', '"Hohn"'),
('771', '"Jever"'),
('772', '"Laage"'),
('773', '"Norvenich"'),
('774', '"Schleswig"'),
('775', '"Wittmundhafen"'),
('776', '"Neubrandenburg"'),
('777', '"Wunstorf"'),
('778', '"Vilseck Aaf"'),
('779', '"Coleman Aaf"'),
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('781', '"Landsberg Lech"'),
('782', '"Buchel"'),
('783', '"Erding"'),
('784', '"Furstenfeldbruck"'),
('785', '"Holzdorf"'),
('786', '"Ingolstadt Manching"'),
('787', '"Lechfeld"'),
('788', '"Neuburg"'),
('789', '"Gutersloh"'),
('6888', '"Dusseldorf Hauptbahnhof"'),
('6841', '"Flugplatz Hoexter Holzminden"'),
('6840', '"Dinslaken Schwarze-Heide"'),
('6801', '"Lauf-Lillinghof"'),
('6831', '"Nastaetten"'),
('6830', '"Finsterwalde-Heinrichsruh"'),
('6798', '"Weser-Wuemme"'),
('3986', '"Allgau"'),
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('4036', '"Stuttgart Railway Station"'),
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('5558', '"Heide-Büsum Airport"'),
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('6423', '"Guettin MecklenburgVorpommern Germany"'),
('6450', '"Tannheim"'),
('6489', '"Bienenfarm Airport"'),
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('6522', '"Uetersen"'),
('6523', '"HLP1 HS-16"'),
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('6910', '"Harle Airport"'),
('6975', '"Langeoog Airport"'),
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('7858', '"Heidelberg"'),
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('7893', '"Nannhausen"'),
('7903', '"Marl-Loemuehle Airport"'),
('7905', '"Lahr Airport"'),
('7915', '"Plattling Bahnhof"'),
('7916', '"Osterhofen Bahnhof"'),
('7917', '"Passau Hbf"'),
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('7934', '"Wurzburg HBF"'),
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('8007', '"Itzehoe-Hungriger Wolf Airport"'),
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('8085', '"Rotenburg Wuemme Airport"'),
('8086', '"Wipperfuerth-Neye Airport"'),
('8087', '"Osnabrueck-Atterheide Airport"'),
('8088', '"Ballenstedt Airport"'),

('8089', '"Hartenholm Airport"'),
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('8453', '"WERL KAZERNE"'),
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('8584', '"Zoo"'),
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('8689', '"Segeletz Airport"'),
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('8882', '"Neuwied"'),
('8898', '"Monchengladbach Central Station"'),
('9070', '"Nuernberg Port"'),
('9072', '"Stein"'),
('9073', '"Dippenricht Heliport"'),
('9079', '"Thalmaessing Waizenhofen"'),
('9100', '"Petersdorf"'),
('9137', '"Sonderlandeplatz Schleissheim"'),
('9141', '"Verden Scharnhorst"'),
('9147', '"Bruck-Nittenau"'),


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('9167', '"Puttgarden"'),  
('9176', '"Osnabrueck Hbf"'),  
('9177', '"Hannover Hbf"'),  
('9232', '"Neumuenster"'),  
('9380', '"Pellworm"'),  
('9385', '"Weimar"')]
```

Command took 0.40 seconds -- by 06varshagupta@gmail.com at 8/28/2022, 6:39:32 PM on 6639