

Dataset :
pokeman.csv having 721 lines

1. Log in to grunt shell using command `pig -x local`

2. Load data using

```
LOAD_DATA = LOAD '/Users/Disha/Downloads/Pokemon.csv' USING
```

```
PigStorage(',')
```

```
AS(Sno:int,Name:chararray,Type1:chararray,Type2:chararray,Total:int,  
HP:int,Attack:int,Defense:int,SpAtk:int,SpDef:int,Speed:int);
```

3.dump data and check data is loaded or not using
`dump LOAD_DATA`

output:

```
(683,Aromatisse,Fairy,,462,101,72,72,99,89,29)
(684,Swirlax,Fairy,,341,62,48,66,59,57,49)
(685,Slurpuff,Fairy,,480,82,80,86,85,75,72)
(686,Inkay,Dark,Psychic,288,53,54,53,37,46,45)
(687,Malamar,Dark,Psychic,482,86,92,88,68,75,73)
(688,Binacle,Rock,Water,306,42,52,67,39,56,50)
(689,Barbaracle,Rock,Water,500,72,105,115,54,86,68)
(690,Skrelp,Poison,Water,320,50,60,60,60,60,30)
(691,Dragalge,Poison,Dragon,494,65,75,90,97,123,44)
(692,Clauncher,Water,,330,50,53,62,58,63,44)
(693,Clawitzer,Water,,500,71,73,88,120,89,59)
(694,Helioptile,Electric,Normal,289,44,38,33,61,43,70)
(695,Helioptile,Electric,Normal,481,62,55,52,109,94,109)
(696,Tyrunt,Rock,Dragon,362,58,89,77,45,45,48)
(697,Tyrunt,Rock,Dragon,521,82,121,119,69,59,71)
(698,Amaura,Rock,Ice,362,77,59,50,67,63,46)
(699,Aurorus,Rock,Ice,521,123,77,72,99,92,58)
(700,Sylveon,Fairy,,525,95,65,65,110,130,60)
(701,Hawlucha,Fighting,Flying,500,78,92,75,74,63,118)
(702,Dedenne,Electric,Fairy,431,67,58,57,81,67,101)
(703,Carbink,Rock,Fairy,500,50,50,150,50,150,50)
(704,Goomy,Dragon,,300,45,50,35,55,75,40)
(705,Sliggoo,Dragon,,452,68,75,53,83,113,60)
(706,Goodra,Dragon,,600,90,100,70,110,150,80)
(707,Klefki,Steel,Fairy,470,57,80,91,80,87,75)
(708,Phantump,Ghost,Grass,309,43,70,48,50,60,38)
(709,Trevenant,Ghost,Grass,474,85,110,76,65,82,56)
(710,PumpkabooAverage Size,Ghost,Grass,335,49,66,70,44,55,51)
(710,PumpkabooSmall Size,Ghost,Grass,335,44,66,70,44,55,56)
(710,PumpkabooLarge Size,Ghost,Grass,335,54,66,70,44,55,46)
(710,PumpkabooSuper Size,Ghost,Grass,335,59,66,70,44,55,41)
(711,GourgeistAverage Size,Ghost,Grass,494,65,90,122,58,75,84)
(711,GourgeistSmall Size,Ghost,Grass,494,55,85,122,58,75,99)
(711,GourgeistLarge Size,Ghost,Grass,494,75,95,122,58,75,69)
(711,GourgeistSuper Size,Ghost,Grass,494,85,100,122,58,75,54)
(712,Bergmite,Ice,,304,55,69,85,32,35,28)
(713,Avalugg,Ice,,514,95,117,184,44,46,28)
(714,Noibat,Flying,Dragon,245,40,30,35,45,40,55)
(715,Noivern,Flying,Dragon,535,85,70,80,97,80,123)
(716,Xerneas,Fairy,,680,126,131,95,131,98,99)
(717,Yveltal,Dark,Flying,680,126,131,95,131,98,99)
(718,Zygarde50% Forme,Dragon,Ground,600,100,100,121,81,95,95)
(719,Diancie,Rock,Fairy,600,50,100,150,100,150,50)
(719,DiancieMega Diancie,Rock,Fairy,700,50,160,110,160,110,110)
(720,HoopaHoopa Confined,Psychic,Ghost,600,80,110,60,150,130,70)
(720,HoopaHoopa Unbound,Psychic,Dark,680,80,160,60,170,130,80)
(721,Volcanion,Fire,Water,600,80,110,120,130,90,70)
grunt> █
```

Ques 1: Find the list of players that have been selected in the qualifying round (DEFENCE>55).

```
grunt> selected_list = FILTER LOAD_DATA BY Defense>55;
grunt> dump selected_list
```

```

Disha — java -Xmx1000m -Djava.net.preferIPv4Stack=true -Djava.security.krb5.realm= -Djava.security.krb5.kdc= -Dhadoop.log.dir=/usr/local/Cel...
java -Xmx10...2.jar -x local  java -Xmx10...2.jar -x local  ~/Downloads — -bash  ~ — java • spark-shell  ...0/libexec/python — -bash  +
(675, Pangoro, Fighting, Dark, 495, 95, 124, 78, 69, 71, 58)
(676, Furfrou, Normal, , 472, 75, 80, 60, 65, 90, 102)
(678, MeowsticMale, Psychic, , 466, 74, 48, 76, 83, 81, 104)
(678, MeowsticFemale, Psychic, , 466, 74, 48, 76, 83, 81, 104)
(679, Honedge, Steel, Ghost, 325, 45, 80, 100, 35, 37, 28)
(680, Doublade, Steel, Ghost, 448, 59, 110, 150, 45, 49, 35)
(681, AegislashShield Forme, Steel, Ghost, 520, 60, 50, 150, 50, 150, 60)
(682, Spritzee, Fairy, , 341, 78, 52, 60, 63, 65, 23)
(683, Aromatisse, Fairy, , 462, 101, 72, 72, 99, 89, 29)
(684, Swirlix, Fairy, , 341, 62, 48, 66, 59, 57, 49)
(685, Slurpuff, Fairy, , 480, 82, 80, 86, 85, 75, 72)
(687, Malamar, Dark, Psychic, 482, 86, 92, 88, 68, 75, 73)
(688, Binacle, Rock, Water, 306, 42, 52, 67, 39, 56, 50)
(689, Barbaracle, Rock, Water, 500, 72, 105, 115, 54, 86, 68)
(690, Skrelp, Poison, Water, 320, 50, 60, 60, 60, 60, 30)
(691, Dragalge, Poison, Dragon, 494, 65, 75, 90, 97, 123, 44)
(692, Clauncher, Water, , 330, 50, 53, 62, 58, 63, 44)
(693, Clawitzer, Water, , 500, 71, 73, 88, 120, 89, 59)
(696, Tyrunt, Rock, Dragon, 362, 58, 89, 77, 45, 45, 48)
(697, Tyrantrum, Rock, Dragon, 521, 82, 121, 119, 69, 59, 71)
(699, Aurorus, Rock, Ice, 521, 123, 77, 72, 99, 92, 58)
(700, Sylveon, Fairy, , 525, 95, 65, 65, 110, 130, 60)
(701, Hawlucha, Fighting, Flying, 500, 78, 92, 75, 74, 63, 118)
(702, Dedenne, Electric, Fairy, 431, 67, 58, 57, 81, 67, 101)
(703, Carbink, Rock, Fairy, 500, 50, 50, 150, 50, 150, 50)
(706, Goodra, Dragon, , 600, 90, 100, 70, 110, 150, 80)
(707, Klefki, Steel, Fairy, 470, 57, 80, 91, 80, 87, 75)
(709, Trevenant, Ghost, Grass, 474, 85, 110, 76, 65, 82, 56)
(710, PumpkabooAverage Size, Ghost, Grass, 335, 49, 66, 70, 44, 55, 51)
(710, PumpkabooSmall Size, Ghost, Grass, 335, 44, 66, 70, 44, 55, 56)
(710, PumpkabooLarge Size, Ghost, Grass, 335, 54, 66, 70, 44, 55, 46)
(710, PumpkabooSuper Size, Ghost, Grass, 335, 59, 66, 70, 44, 55, 41)
(711, GourgeistAverage Size, Ghost, Grass, 494, 65, 90, 122, 58, 75, 84)
(711, GourgeistSmall Size, Ghost, Grass, 494, 55, 85, 122, 58, 75, 99)
(711, GourgeistLarge Size, Ghost, Grass, 494, 75, 95, 122, 58, 75, 69)
(711, GourgeistSuper Size, Ghost, Grass, 494, 85, 100, 122, 58, 75, 54)
(712, Bergmite, Ice, , 304, 55, 69, 85, 32, 35, 28)
(713, Avalugg, Ice, , 514, 95, 117, 184, 44, 46, 28)
(715, Noivern, Flying, Dragon, 535, 85, 70, 80, 97, 80, 123)
(716, Xerneas, Fairy, , 680, 126, 131, 95, 131, 98, 99)
(717, Yveltal, Dark, Flying, 680, 126, 131, 95, 131, 98, 99)
(718, Zygarde50% Forme, Dragon, Ground, 600, 108, 100, 121, 81, 95, 95)
(719, Diancie, Rock, Fairy, 600, 50, 100, 150, 100, 150, 50)
(719, DiancieMega Diancie, Rock, Fairy, 700, 50, 160, 110, 160, 110, 110)
(720, HoopaHoopa Confined, Psychic, Ghost, 600, 80, 110, 60, 150, 130, 70)
(720, HoopaHoopa Unbound, Psychic, Dark, 680, 80, 160, 60, 170, 130, 80)
(721, Volcanion, Fire, Water, 600, 80, 110, 120, 130, 90, 70)
grunt> dump selected_list

```

Ques 2: State the number of players taking part in the competition after getting selected in the qualifying round.

```

grunt> group_selected_list = Group selected_list All;
grunt> count_selected_list = foreach group_selected_list GENERATE
COUNT(selected_list);
grunt> dump count_selected_list;

```

```

Disha — java -Xmx1000m -Djava.net.preferIPv4Stack=true -Djava.security.krb5.realm= -Djava.security.krb5.kdc= -Dhadoop.log.dir=/usr/local/Cel...
java -Xmx10...2.jar -x local  java -Xmx10...2.jar -x local  ~/Downloads — -bash  ~ — java • spark-shell  ...0//libexec/python — -bash  +
2017-09-14 23:49:28,428 [main] INFO  org.apache.pig.tools.pigstats.mapreduce.SimplePigStats - Script Statistics:

HadoopVersion  PigVersion  UserId  StartedAt  FinishedAt  Features
2.8.1  0.16.0  Disha  2017-09-14 23:49:25  2017-09-14 23:49:28  GROUP_BY,FILTER

Success!

Job Stats (time in seconds):
JobId  Maps  Reduces  MaxMapTime  MinMapTime  AvgMapTime  MedianMapTime  MaxReduceTime  MinReduceTime  AvgReduceTime  M
edianReductime Alias  Feature Outputs
job_local998261510_0011 1 1 n/a n/a n/a n/a n/a n/a n/a LOAD_DATA,count_selected_list,gr
oup_selected_list,selected_list GROUP_BY,COMBINER  file:/tmp/temp-1934030414/tmp-1718968177,

Input(s):
Successfully read 801 records from: "/Users/Disha/Downloads/Pokemon.csv"

Output(s):
Successfully stored 1 records in: "file:/tmp/temp-1934030414/tmp-1718968177"

Counters:
Total records written : 1
Total bytes written : 0
Spillable Memory Manager spill count : 0
Total bags proactively spilled: 0
Total records proactively spilled: 0

Job DAG:
job_local998261510_0011

2017-09-14 23:49:28,431 [main] INFO  org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-14 23:49:28,433 [main] INFO  org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-14 23:49:28,435 [main] INFO  org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-14 23:49:28,438 [main] WARN  org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Encountered Warnin
g FIELD_DISCARDED_TYPE_CONVERSION_FAILED 8 time(s).
2017-09-14 23:49:28,438 [main] INFO  org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Success!
2017-09-14 23:49:28,439 [main] INFO  org.apache.hadoop.conf.Configuration.deprecation - fs.default.name is deprecated. Instead, use fs.d
efaultFS
2017-09-14 23:49:28,439 [main] INFO  org.apache.hadoop.conf.Configuration.deprecation - io.bytes.per.checksum is deprecated. Instead, us
e dfs.bytes-per-checksum
2017-09-14 23:49:28,439 [main] WARN  org.apache.pig.data.SchemaTupleBackend - SchemaTupleBackend has already been initialized
2017-09-14 23:49:28,643 [main] INFO  org.apache.hadoop.mapreduce.lib.input.FileInputFormat - Total input files to process : 1
2017-09-14 23:49:28,643 [main] INFO  org.apache.pig.backend.hadoop.executionengine.util.MapRedUtil - Total input paths to process : 1
(544)
grunt> █

```

Ques 3: Using random() generate random numbers for each Pokémon on the selected list.

```

grunt> random_include1 = foreach selected_list GENERATE
RANDOM(),Name,Type1,Type2,Total,HP,Attack,Defense,SpAtk,SpDef,Speed;
grunt> dump random_include1;

```

```
Disha — java -Xmx1000m -Djava.net.preferIPv4Stack=true -Djava.security.krb5.realm= -Djava.security.krb5.kdc= -Dhadoop.log.dir=/usr/local/Cel...
java -Xmx10...2.jar -x local    java -Xmx10...2.jar -x local    ~/Downloads — -bash    ~ — java • spark-shell    ...0/ibexec/python — -bash    +
(0.24074816612217664,Pangoro,Fighting,Dark,495,95,124,78,69,71,58)
(0.9059271219948806,Furfrou,Normal,,472,75,80,60,65,90,102)
(0.8893397403908457,MeowsticMale,Psychic,,466,74,48,76,83,81,104)
(0.7246943125883608,MeowsticFemale,Psychic,,466,74,48,76,83,81,104)
(0.8159353017592369,Honedge,Steel,Ghost,325,45,80,100,35,37,28)
(0.505329673484235,Doublade,Steel,Ghost,448,59,110,150,45,49,35)
(0.7304811503309749,AegislashShield Forme,Steel,Ghost,520,60,50,150,50,150,60)
(0.8922404890746224,Spritzee,Fairy,,341,78,52,60,63,65,23)
(0.9280939562881244,Aromatisse,Fairy,,462,101,72,72,99,89,29)
(0.32030466495508014,Swirlx,Fairy,,341,62,48,66,59,57,49)
(0.19273871015947974,Slurpuff,Fairy,,480,82,80,86,85,75,72)
(0.5801271185282104,Malamar,Dark,Psychic,482,86,92,88,68,75,73)
(0.8910195229458121,Binacle,Rock,Water,306,42,52,67,39,56,50)
(0.7532522046579956,Barbaracle,Rock,Water,500,72,105,115,54,86,68)
(0.46770332627908273,Skelp,Poison,Water,320,50,60,60,60,60,30)
(0.9836077724009004,Dragalge,Poison,Dragon,494,65,75,90,97,123,44)
(0.4670597012374793,Clauncher,Water,,330,50,53,62,58,63,44)
(0.2683941764221027,Clawitzer,Water,,500,71,73,88,120,89,59)
(0.8439211519745424,Tyrunt,Rock,Dragon,362,58,89,77,45,45,48)
(0.5721953259236523,Tyrantrum,Rock,Dragon,521,82,121,119,69,59,71)
(0.6301137296443746,Aurorus,Rock,Ice,521,123,77,72,99,92,58)
(0.7221604314286613,Sylveon,Fairy,,525,95,65,65,110,130,60)
(0.6232764301896371,Hawlucha,Fighting,Flying,500,78,92,75,74,63,118)
(0.18769336746404686,Dedenne,Electric,Fairy,431,67,58,57,81,67,101)
(0.25689713341777554,Carbink,Rock,Fairy,500,50,50,150,50,150,50)
(0.5213230222460975,Goodra,Dragon,,600,90,100,70,110,150,80)
(0.9865903898085405,Klefki,Steel,Fairy,470,57,80,91,80,87,75)
(0.802571773291159,Trevenant,Ghost,Grass,474,85,110,76,65,82,56)
(0.6352965526646389,PumpkabooAverage Size,Ghost,Grass,335,49,66,70,44,55,51)
(0.3260725525275264,PumpkabooSmall Size,Ghost,Grass,335,44,66,70,44,55,56)
(0.12938930756870348,PumpkabooLarge Size,Ghost,Grass,335,54,66,70,44,55,46)
(0.279415077110598,PumpkabooSuper Size,Ghost,Grass,335,59,66,70,44,55,41)
(0.8319593229720484,GourgeistAverage Size,Ghost,Grass,494,65,90,122,58,75,84)
(0.6138627944041918,GourgeistSmall Size,Ghost,Grass,494,55,85,122,58,75,99)
(0.34524049129513945,GourgeistLarge Size,Ghost,Grass,494,75,95,122,58,75,69)
(0.3989385160640816,GourgeistSuper Size,Ghost,Grass,494,85,100,122,58,75,54)
(0.7708331024147945,Bergmite,Ice,,304,55,69,85,32,35,28)
(0.9247327397541351,Avalugg,Ice,,514,95,117,184,44,46,28)
(0.2467503220015611,Noivern,Flying,Dragon,535,85,70,80,97,80,123)
(0.7570096099106384,Xerneas,Fairy,,680,126,131,95,131,98,99)
(0.34019049972841764,Yveltal,Dark,Flying,680,126,131,95,131,98,99)
(0.019948396522119327,Zygarde50% Forme,Dragon,Ground,600,108,100,121,81,95,95)
(0.9832633739147054,Diancie,Rock,Fairy,600,50,100,150,100,150,50)
(0.8705959868665197,DiancieMega Diancie,Rock,Fairy,700,50,160,110,160,110,110)
(0.9677451154236295,HoopaHoopa Confined,Psychic,Ghost,600,80,110,60,150,130,70)
(0.5031889783412086,HoopaHoopa Unbound,Psychic,Dark,680,80,160,60,170,130,80)
(0.13949752090453327,Volcanion,Fire,Water,600,80,110,120,130,90,70)
grunt> dump random_include1;
```

Ques 4: Arrange the new list in a descending order according to a column randomly.

```
grunt> random1_desending = ORDER random_include1 BY $0 DESC;
grunt> dump random1_desending;
```

```
Disha — java -Xmx1000m -Djava.net.preferIPv4Stack=true -Djava.security.krb5.realm= -Djava.security.krb5.kdc= -Dhadoop.log.dir=/usr/local/Cel...
java -Xmx10...2.jar -x local    java -Xmx10...2.jar -x local    ~/Downloads — -bash    ~ — java • spark-shell    ...0/ibexec/python — -bash    +
(0.00861573521881138,Medicham,Fighting,Psychic,410,60,60,75,60,75,80)
(0.00830364459446393,Vespiquen,Bug,Flying,474,70,80,102,80,102,40)
(0.07907774167289094,Kecleon,Normal,,440,60,90,70,60,120,40)
(0.07623040612687226,Goldeen,Water,,320,45,67,60,35,50,63)
(0.07436880345921015,GourgeistLarge Size,Ghost,Grass,494,75,95,122,58,75,69)
(0.07239847596578308,Clefable,Fairy,,483,95,70,73,95,90,60)
(0.06870480583596184,Blaziken,Fire,Fighting,530,80,120,70,110,70,80)
(0.06587663354936302,RotomWash Rotom,Electric,Water,520,50,65,107,105,107,86)
(0.06533420033832726,MeowsticMale,Psychic,,466,74,48,76,83,81,104)
(0.06469845010930697,Spewpa,Bug,,213,45,22,60,27,30,29)
(0.06418440249157598,Conkeldurr,Fighting,,505,105,140,95,55,65,45)
(0.0639806814771634,Seviper,Poison,,458,73,100,60,100,60,65)
(0.06323175644210177,Slowking,Water,Psychic,490,95,75,80,100,110,30)
(0.063008353279136147,Luxray,Electric,,523,80,120,79,95,79,70)
(0.06179749424403802,KyogrePrimal Kyogre,Water,,770,100,150,90,180,160,90)
(0.059221684235212124,Virizion,Grass,Fighting,580,91,90,72,90,129,108)
(0.05915192268068192,Nincada,Bug,Ground,266,31,45,90,30,30,40)
(0.05843851252039589,TornadusIncarnate Forme,Flying,,580,79,115,70,125,80,111)
(0.05841480600413018,Raikou,Electric,,580,90,85,75,115,100,115)
(0.05238314760776974,Scizor,Bug,Steel,500,70,130,100,55,80,65)
(0.050854105534919425,Gigalith,Rock,,515,85,135,130,60,80,25)
(0.04922325931965177,Scolipede,Bug,Poison,485,60,100,89,55,69,112)
(0.0487022426827894,Noivern,Flying,Dragon,535,85,70,80,97,80,123)
(0.04712361717419111,Heatmor,Fire,,484,85,97,66,105,66,65)
(0.046125537376068615,ShayminSky Forme,Grass,Flying,600,100,103,75,120,75,127)
(0.03489470376693604,Kyogre,Water,,670,100,100,90,150,140,90)
(0.03443313765655465,Froslass,Ice,Ghost,480,70,80,70,80,70,110)
(0.03401941333052416,SteelixMega Steelix,Steel,Ground,610,75,125,230,55,95,30)
(0.032893237716386414,Cacturne,Grass,Dark,475,70,115,60,115,60,55)
(0.03014728615639506,BlastoiseMega Blastoise,Water,,630,79,103,120,135,115,78)
(0.02955758361314087,Sigilyph,Psychic,Flying,490,72,58,80,103,80,97)
(0.02393882689228366,BlazikenMega Blaziken,Fire,Fighting,630,80,160,80,130,80,100)
(0.02195407639732061,Chimecho,Psychic,,425,65,50,70,95,80,65)
(0.0217836345201593,Mesprit,Psychic,,580,80,105,105,105,105,80)
(0.020997703462968142,Zapdos,Electric,Flying,580,90,90,85,125,90,100)
(0.018722232730864707,AegislashShield Forme,Steel,Ghost,520,60,50,150,50,150,60)
(0.015141642421416135,Jellicent,Water,Ghost,480,100,60,70,85,105,60)
(0.015007392233214314,Furret,Normal,,415,85,76,64,45,55,90)
(0.01411842216402548,Owlifish,Water,Poison,430,65,95,75,55,55,85)
(0.012609065681622456,LatiosMega Latios,Dragon,Psychic,700,80,130,100,160,120,110)
(0.01205255453689591,Victreebel,Grass,Poison,490,80,105,65,100,70,70)
(0.00857534975296348,Magmortar,Fire,,540,75,95,67,125,95,83)
(0.007837152634593392,GiratinaOrigin Forme,Ghost,Dragon,680,150,120,100,120,100,90)
(0.006640231351156656,Absol,Dark,,465,65,130,60,75,60,75)
(0.006283682400320845,Wartortle,Water,,405,59,63,80,65,80,58)
(0.005105940415650045,Combusken,Fire,Fighting,405,60,85,60,85,60,55)
(0.004762119524470698,Mightyena,Dark,,420,70,90,70,60,60,70)
grunt>
```

Ques 5: Now on a new relation again associate random numbers for each Pokémon and arrange in descending order according to column random.

```
grunt> random_include2 = foreach selected_list GENERATE  
RANDOM(),Name,Type1,Type2,Total,HP,Attack,Defense,SpAtk,SpDef,Speed;  
grunt> dump random_include2;
```



```
Disha — java -Xmx1000m -Djava.net.preferIPv4Stack=true -Djava.security.krb5.realm= -Djava.security.krb5.kdc= -Dhadoop.log.dir=/usr/local/Cel...
java -Xmx10...2.jar -x local    java -Xmx10...2.jar -x local    ~/Downloads — -bash    ~ — java • spark-shell    ...0/libexec/python — -bash    +

(0.833899778231666,Pangoro,Fighting,Dark,495,95,124,78,69,71,58)
(0.5339447663285968,Furfrou,Normal,,472,75,80,60,65,90,102)
(0.510203396034926,MeowsticMale,Psychic,,466,74,48,76,83,81,104)
(0.4015179186787682,MeowsticFemale,Psychic,,466,74,48,76,83,81,104)
(0.272610245777545,Honedge,Steel,Ghost,325,45,80,100,35,37,28)
(0.8306275183992547,Doublade,Steel,Ghost,448,59,110,150,45,49,35)
(0.5443645307187203,AegislashShield Forme,Steel,Ghost,520,60,50,150,50,150,60)
(0.0752512392037675,Spritzee,Fairy,,341,78,52,60,63,65,23)
(0.3054807573960504,Aromatisse,Fairy,,462,101,72,72,99,89,29)
(0.4966816387319172,Swirlx,Fairy,,341,62,48,66,59,57,49)
(0.0032152167072697635,Slurpuff,Fairy,,480,82,80,86,85,75,72)
(0.46064535107502236,Malamar,Dark,Psychic,482,86,92,88,68,75,73)
(0.8492115880834354,Binacle,Rock,Water,306,42,52,67,39,56,50)
(0.06391047538202543,Barbaracle,Rock,Water,500,72,105,115,54,86,68)
(0.796695325879661,SkreIp,Poison,Water,320,50,60,60,60,60,30)
(0.035433432817083665,Dragalge,Poison,Dragon,494,65,75,90,97,123,44)
(0.25876616107870754,Clauncher,Water,,330,50,53,62,58,63,44)
(0.006953406212087,Clawitzer,Water,,500,71,73,88,120,89,59)
(0.49862216465466314,Tyrunt,Rock,Dragon,362,58,89,77,45,45,48)
(0.325791070332077,Tyranttrum,Rock,Dragon,521,82,121,119,69,59,71)
(0.5876112284999004,Aurorus,Rock,Ice,521,123,77,72,99,92,58)
(0.47067307894596166,Sylveon,Fairy,,525,95,65,65,110,130,60)
(0.5211308284944505,Hawlucha,Fighting,Flying,500,78,92,75,74,63,118)
(0.9775386999248843,Dedenne,Electric,Fairy,431,67,58,57,81,67,101)
(0.0300286127542251,Carbink,Rock,Fairy,500,50,50,150,50,150,50)
(0.149963587930236,Goodra,Dragon,,600,90,100,70,110,150,80)
(0.49107321404820126,Klefki,Steel,Fairy,470,57,80,91,80,87,75)
(0.847163353545329,Trevenant,Ghost,Grass,474,85,110,76,65,82,56)
(0.18109106663931374,PumpkabooAverage Size,Ghost,Grass,335,49,66,70,44,55,51)
(0.6562387639479995,PumpkabooSmall Size,Ghost,Grass,335,44,66,70,44,55,56)
(0.628699358281774,PumpkabooLarge Size,Ghost,Grass,335,54,66,70,44,55,46)
(0.37475027732007904,PumpkabooSuper Size,Ghost,Grass,335,59,66,70,44,55,41)
(0.5875300290503431,GourgeistAverage Size,Ghost,Grass,494,65,90,122,58,75,84)
(0.08083599527888141,GourgeistSmall Size,Ghost,Grass,494,55,85,122,58,75,99)
(0.9064832113621408,GourgeistLarge Size,Ghost,Grass,494,75,95,122,58,75,69)
(0.042517509646318286,GourgeistSuper Size,Ghost,Grass,494,85,100,122,58,75,54)
(0.42944434192628644,Bergmite,Ice,,304,55,69,85,32,35,28)
(0.42279792782948,Avalugg,Ice,,514,95,117,184,44,46,28)
(0.7747449581632592,Noivern,Flying,Dragon,535,85,70,80,97,80,123)
(0.3454973611674086,Xerneas,Fairy,,680,126,131,95,131,98,99)
(0.07401651743991378,Yveltal,Dark,Flying,680,126,131,95,131,98,99)
(0.08697065356463651,Zygarde50% Forme,Dragon,Ground,600,108,100,121,81,95,95)
(0.28076015476651905,Diancie,Rock,Fairy,600,50,100,150,100,150,50)
(0.4050104988474956,DiancieMega Diancie,Rock,Fairy,700,50,160,110,160,110,110)
(0.6716245346687859,HoopaHoopa Confined,Psychic,Ghost,600,80,110,60,150,130,70)
(0.7780836029313402,HoopaHoopa Unbound,Psychic,Dark,600,80,160,60,170,130,80)
(0.47933557910390445,Volcanion,Fire,Water,600,80,110,120,130,90,70)
grunt> █
```

```
grunt> random2_desending = ORDER random_include2 BY $0 DESC;
grunt> dump random2_desending;
```

```
Disha — java -Xmx1000m -Djava.net.preferIPv4Stack=true -Djava.security.krb5.realm= -Djava.security.krb5.kdc= -Dhadoop.log.dir=/usr/local/Cel...
java -Xmx10...2.jar -x local    java -Xmx10...2.jar -x local    ~/Downloads — -bash    ~ — java • spark-shell    ...0/libexec/python — -bash    +

(0.07686296279532734, Swanna, Water, Flying, 473, 75, 87, 63, 87, 63, 98)
(0.07465654388829635, Tangela, Grass,, , 435, 65, 55, 115, 100, 40, 60)
(0.07435060709939745, Venipede, Bug, Poison, 260, 30, 45, 59, 30, 39, 57)
(0.07427838672368414, Shellder, Water,, , 305, 30, 65, 100, 45, 25, 40)
(0.07169060553637319, Torterra, Grass, Ground, 525, 95, 109, 105, 75, 85, 56)
(0.06990871649980335, Lairon, Steel, Rock, 430, 60, 90, 140, 50, 50, 40)
(0.06986932330603934, Cofagrigus, Ghost,, , 483, 58, 50, 145, 95, 105, 30)
(0.0688736968222825, Pawniard, Dark, Steel, 340, 45, 85, 70, 40, 40, 60)
(0.06842724855075288, Maractus, Grass,, , 461, 75, 86, 67, 106, 67, 60)
(0.06509564013206359, Pinsir, Bug,, , 500, 65, 125, 100, 55, 70, 85)
(0.060740202934080334, Barbaracle, Rock, Water, 500, 72, 105, 115, 54, 86, 68)
(0.05948707223579619, Dialga, Steel, Dragon, 680, 100, 120, 120, 150, 100, 90)
(0.05884173021877548, Braviary, Normal, Flying, 510, 100, 123, 75, 57, 75, 80)
(0.058839279999542304, Koffing, Poison,, , 340, 40, 65, 95, 60, 45, 35)
(0.057657911144929797, Combusken, Fire, Fighting, 405, 60, 85, 60, 85, 60, 55)
(0.057433611985578725, Trevenant, Ghost, Grass, 474, 85, 110, 76, 65, 82, 56)
(0.054517269407966196, DiancieMega Diancie, Rock, Fairy, 700, 50, 160, 110, 160, 110, 110)
(0.05259909636415694, Squirtle, Water,, , 314, 44, 48, 65, 50, 64, 43)
(0.04820526067311126, Xatu, Psychic, Flying, 470, 65, 75, 70, 95, 70, 95)
(0.04814899879584045, Gliscor, Ground, Flying, 510, 75, 95, 125, 45, 75, 95)
(0.04802107113112197, Tangrowth, Grass,, , 535, 100, 100, 125, 110, 50, 50)
(0.04104598505431112, Exploud, Normal,, , 490, 104, 91, 63, 91, 73, 68)
(0.04083145543108113, Goodra, Dragon,, , 600, 90, 100, 70, 110, 150, 80)
(0.04007349036784613, Hippopotas, Ground,, , 330, 68, 72, 78, 38, 42, 32)
(0.03224007784452931, Druddigon, Dragon,, , 485, 77, 120, 90, 60, 90, 48)
(0.03219450066142482, Starmie, Water, Psychic, 520, 60, 75, 85, 100, 85, 115)
(0.03216652343495929, Quilava, Fire,, , 405, 58, 64, 58, 80, 65, 80)
(0.029838519259084872, Metagross, Steel, Psychic, 600, 80, 135, 130, 95, 90, 70)
(0.0244499866846426, Shroomish, Grass,, , 295, 60, 40, 60, 40, 60, 35)
(0.024205838157699833, PumpkabooSmall Size, Ghost, Grass, 335, 44, 66, 70, 44, 55, 56)
(0.023657505409557356, Noivern, Flying, Dragon, 535, 85, 70, 80, 97, 80, 123)
(0.022460467581049692, Roggenrola, Rock,, , 280, 55, 75, 85, 25, 25, 15)
(0.02106880264780442, Volcarona, Bug, Fire, 550, 85, 60, 65, 135, 105, 100)
(0.02012854014376919, Sewaddle, Bug, Grass, 310, 45, 53, 70, 40, 60, 42)
(0.019087697750841737, Ludicolo, Water, Grass, 480, 80, 70, 70, 90, 100, 70)
(0.01689101763172296, Gallade, Psychic, Fighting, 518, 68, 125, 65, 65, 115, 80)
(0.016786037723378278, Magnezone, Electric, Steel, 535, 70, 70, 115, 130, 90, 60)
(0.015185514045573334, Dedenne, Electric, Fairy, 431, 67, 58, 57, 81, 67, 101)
(0.014278506815454173, Bellossom, Grass,, , 490, 75, 80, 95, 90, 100, 50)
(0.012003853433223942, Whiscash, Water, Ground, 468, 110, 78, 73, 76, 71, 60)
(0.00890249947031485, Magcargo, Fire, Rock, 410, 50, 50, 120, 80, 80, 30)
(0.008568571106260414, Metang, Steel, Psychic, 420, 60, 75, 100, 55, 80, 50)
(0.0067027182331368396, Regirock, Rock,, , 580, 80, 100, 200, 50, 100, 50)
(0.006164711506513987, Persian, Normal,, , 440, 65, 70, 60, 65, 65, 115)
(0.0036417014128024006, Swalot, Poison,, , 467, 100, 73, 83, 73, 83, 55)
(0.0015934380926415637, Omanyte, Rock, Water, 355, 35, 40, 100, 90, 55, 35)
(0.0010362944269800556, Ampharos, Electric,, , 510, 90, 75, 85, 115, 90, 55)
grunt> █
```

Ques: From the two different descending lists of random Pokémons, select the top 5 Pokémons for 2 different players.

```
grunt> limit_data_random1_desending = LIMIT random1_desending 5 ;
grunt> dump limit_data_random1_desending;
```

Disha — java -Xmx1000m -Djava.net.preferIPv4Stack=true -Djava.security.krb5.realm= -Djava.security.krb5.kdc= -Dhadoop.log.dir=/usr/local/Cel...
 java -Xmx10...2.jar -x local java -Xmx10...2.jar -x local ~/Downloads — -bash ~ — java • spark-shell ...0/libexec/python — -bash +

```
Job DAG:
job_local1387318164_0017    ->    job_local1021163752_0018,
job_local1021163752_0018    ->    job_local2048438767_0019,
job_local2048438767_0019    ->    job_local1523206294_0020,
job_local1523206294_0020
```

```
2017-09-14 23:59:14,220 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-14 23:59:14,222 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-14 23:59:14,224 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-14 23:59:14,228 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-14 23:59:14,230 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-14 23:59:14,233 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-14 23:59:14,239 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-14 23:59:14,242 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-14 23:59:14,245 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-14 23:59:14,250 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-14 23:59:14,253 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-14 23:59:14,254 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-14 23:59:14,256 [main] WARN org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Encountered Warnin
g FIELD_DISCARDED_TYPE_CONVERSION_FAILED 7 time(s).
2017-09-14 23:59:14,256 [main] INFO org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Success!
2017-09-14 23:59:14,257 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - fs.default.name is deprecated. Instead, use fs.d
efaultFS
2017-09-14 23:59:14,257 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - io.bytes.per.checksum is deprecated. Instead, us
e dfs.bytes-per-checksum
2017-09-14 23:59:14,258 [main] WARN org.apache.pig.data.SchemaTupleBackend - SchemaTupleBackend has already been initialized
2017-09-14 23:59:14,277 [main] INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat - Total input files to process : 1
2017-09-14 23:59:14,278 [main] INFO org.apache.pig.backend.hadoop.executionengine.util.MapRedUtil - Total input paths to process : 1
(0.9988268358423977,Glalie,Ice,,480,80,80,80,80,80)
(0.9969707056815216,Seaking,Water,,450,80,92,65,65,80,68)
(0.9966972568919037,Carnivine,Grass,,454,74,100,72,90,72,46)
(0.9955183880725013,Gothorita,Psychic,,390,60,45,70,75,85,55)
(0.9954954748144873,Electivire,Electric,,540,75,123,67,95,85,95)
grunt> dump limit_data_random1_desending;
```

```
grunt> limit_data_random2_desending = LIMIT random2_desending 5 ;
grunt> dump limit_data_random2_desending;
```



```
Disha — java -Xmx1000m -Djava.net.preferIPv4Stack=true -Djava.security.krb5.realm= -Djava.security.krb5.kdc= -Dhadoop.log.dir=/usr/local/Cel...
java -Xmx10...2.jar -x local    java -Xmx10...2.jar -x local    ~/Downloads — -bash    ~ — java • spark-shell    ...0/!libexec/python — -bash    +

Job DAG:
job_local373330691_0028 ->    job_local1632342822_0029,
job_local1632342822_0029 ->    job_local1701862743_0030,
job_local1701862743_0030 ->    job_local1016502593_0031,
job_local1016502593_0031

2017-09-15 00:06:02,790 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:06:02,792 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:06:02,794 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:06:02,798 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:06:02,800 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:06:02,802 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:06:02,833 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:06:02,835 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:06:02,839 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:06:02,842 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:06:02,844 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:06:02,845 [main] INFO org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:06:02,847 [main] WARN org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Encountered Warnin
g FIELD_DISCARDED_TYPE_CONVERSION_FAILED 7 time(s).
2017-09-15 00:06:02,847 [main] INFO org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Success!
2017-09-15 00:06:02,847 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - fs.default.name is deprecated. Instead, use fs.d
efaultFS
2017-09-15 00:06:02,847 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - io.bytes.per.checksum is deprecated. Instead, us
e dfs.bytes-per-checksum
2017-09-15 00:06:02,848 [main] WARN org.apache.pig.data.SchemaTupleBackend - SchemaTupleBackend has already been initialized
2017-09-15 00:06:02,864 [main] INFO org.apache.hadoop.mapreduce.lib.input.FileInputFormat - Total input files to process : 1
2017-09-15 00:06:02,864 [main] INFO org.apache.pig.backend.hadoop.executionengine.util.MapRedUtil - Total input paths to process : 1
(0.9977207606096068, TyrannitarMega Tyrannitar, Rock, Dark, 700, 100, 164, 150, 95, 120, 71)
(0.9962925514398017, Hippopotas, Ground,, 330, 68, 72, 78, 38, 42, 32)
(0.9954211912458177, Weezing, Poison,, 490, 65, 90, 120, 85, 70, 60)
(0.9948792361951955, Roggenrola, Rock,, 280, 55, 75, 85, 25, 25, 15)
(0.9927913276895413, Beldum, Steel, Psychic, 300, 40, 55, 80, 35, 60, 30)
grunt> █
```

Ques: Store the data on a local drive to announce for the final match. By the name player1 and player2 (only show the NAME and HP).

```
grunt> filter_only_name1 = foreach limit_data_random1_desending
Generate ($1,HP);
grunt> dump filter_only_name1;
```

```
Disha — java -Xmx1000m -Djava.net.preferIPv4Stack=true -Djava.security.krb5.realm= -Djava.security.krb5.kdc= -Dhadoop.log.dir=/usr/local/Cel...
java -Xmx10...2.jar -x local    java -Xmx10...2.jar -x local    ~/Downloads — -bash    ~ — java • spark-shell    ...0/llbexec/python — -bash    +

Job DAG:
job_local1902528772_0021    ->    job_local1893814475_0022,
job_local1893814475_0022    ->    job_local1907952792_0023,
job_local1907952792_0023    ->    job_local207558773_0024,
job_local207558773_0024

2017-09-15 00:01:52,180 [main] INFO    org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:01:52,182 [main] INFO    org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:01:52,185 [main] INFO    org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:01:52,189 [main] INFO    org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:01:52,191 [main] INFO    org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:01:52,194 [main] INFO    org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:01:52,204 [main] INFO    org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:01:52,207 [main] INFO    org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:01:52,209 [main] INFO    org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:01:52,214 [main] INFO    org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:01:52,216 [main] INFO    org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:01:52,220 [main] INFO    org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:01:52,223 [main] WARN    org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Encountered Warnin
g FIELD_DISCARDED_TYPE_CONVERSION_FAILED 2 time(s).
2017-09-15 00:01:52,223 [main] INFO    org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Success!
2017-09-15 00:01:52,224 [main] INFO    org.apache.hadoop.conf.Configuration.deprecation - fs.default.name is deprecated. Instead, use fs.d
efaultFS
2017-09-15 00:01:52,224 [main] INFO    org.apache.hadoop.conf.Configuration.deprecation - io.bytes.per.checksum is deprecated. Instead, us
e dfs.bytes-per-checksum
2017-09-15 00:01:52,224 [main] WARN    org.apache.pig.data.SchemaTupleBackend - SchemaTupleBackend has already been initialized
2017-09-15 00:01:52,260 [main] INFO    org.apache.hadoop.mapreduce.lib.input.FileInputFormat - Total input files to process : 1
2017-09-15 00:01:52,260 [main] INFO    org.apache.pig.backend.hadoop.executionengine.util.MapRedUtil - Total input paths to process : 1
((Tauros,75))
((PumpkabooLarge Size,54))
((Nincada,31))
((Nosepass,30))
((Ferrothorn,74))
grunt>
```

```
grunt> filter_only_name2 = foreach limit_data_random2_desending
Generate ($1,HP);
grunt> dump filter_only_name2;
```

```
java -Xmx10...2.jar -x local      java -Xmx10...2.jar -x local      ~/Documents — -bash      ~ — java • spark-shell      ...0/libexec/python — -bash      +
HadoopVersion      PigVersion      UserId      StartedAt      FinishedAt      Features
2.8.1      0.16.0      Disha      2017-09-15 00:12:12      2017-09-15 00:12:14      ORDER_BY,FILTER,LIMIT

Success!

Job Stats (time in seconds):
JobId      Maps      Reduces      MaxMapTime      MinMapTime      AvgMapTime      MedianMapTime      MaxReduceTime      MinReduceTime      AvgReduceTime      M
edianReduceTime Alias      Feature      Outputs
job_local1170205723_0042      1      1      n/a      n/a      n/a      n/a      n/a      n/a      random1_desending      0
RDER_BY,COMBINER
job_local310883667_0043      1      1      n/a      n/a      n/a      n/a      n/a      n/a      random1_desending      /
Users/Disha/Documents/player1,
job_local381690916_0040      1      0      n/a      n/a      n/a      0      0      0      LOAD_DATA,random_include1,select
ed_list MAP_ONLY
job_local464497601_0041      1      1      n/a      n/a      n/a      n/a      n/a      n/a      random1_desending      SAMPLER

Input(s):
Successfully read 801 records from: "/Users/Disha/Downloads/Pokemon.csv"

Output(s):
Successfully stored 5 records in: "/Users/Disha/Documents/player1"

Counters:
Total records written : 5
Total bytes written : 0
Spillable Memory Manager spill count : 0
Total bags proactively spilled: 0
Total records proactively spilled: 0

Job DAG:
job_local381690916_0040 ->      job_local464497601_0041,
job_local464497601_0041 ->      job_local1170205723_0042,
job_local1170205723_0042 ->      job_local310883667_0043,
job_local310883667_0043

2017-09-15 00:12:14,984 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:12:14,986 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:12:14,987 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:12:14,990 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:12:14,992 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
Disha — java -Xmx1000m -Djava.net.preferIPv4Stack=true -Djava.security.krb5.realm= -Djava.security.krb5.kdc= -Dhadoop.log.dir=/usr/local/Cel...
java -Xmx10...2.jar -x local      java -Xmx10...2.jar -x local      ~/Downloads — -bash      ~ — java • spark-shell      ...0/libexec/python — -bash      +
```

```
Job DAG:
job_local1907024298_0032      ->      job_local1395664444_0033,
job_local1395664444_0033      ->      job_local1394687764_0034,
job_local1394687764_0034      ->      job_local1011130420_0035,
job_local1011130420_0035

2017-09-15 00:07:39,591 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:07:39,592 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:07:39,594 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:07:39,596 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:07:39,597 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:07:39,599 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:07:39,603 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:07:39,604 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:07:39,606 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:07:39,610 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:07:39,612 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:07:39,614 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:07:39,617 [main] WARN      org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Encountered Warnin
g FIELD_DISCARDED_TYPE_CONVERSION_FAILED 2 time(s).
2017-09-15 00:07:39,617 [main] INFO      org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Success!
2017-09-15 00:07:39,618 [main] INFO      org.apache.hadoop.conf.Configuration.deprecation - fs.default.name is deprecated. Instead, use fs.d
efaultFS
2017-09-15 00:07:39,618 [main] INFO      org.apache.hadoop.conf.Configuration.deprecation - io.bytes.per.checksum is deprecated. Instead, us
e dfs.bytes.per.checksum
2017-09-15 00:07:39,618 [main] WARN      org.apache.pig.data.SchemaTupleBackend - SchemaTupleBackend has already been initialized
2017-09-15 00:07:39,639 [main] INFO      org.apache.hadoop.mapreduce.lib.input.FileInputFormat - Total input files to process : 1
2017-09-15 00:07:39,639 [main] INFO      org.apache.pig.backend.hadoop.executionengine.util.MapRedUtil - Total input paths to process : 1
((Audino,103))
((Braisex,59))
((Altaria,75))
((HoopaHoopa Unbound,80))
((Blastoise,79))
grunt> █
```

grunt> STORE limit_data_random1_desending INTO '/Users/Disha/Documents/player1';

```

java -Xmx10...2.jar -x local      java -Xmx10...2.jar -x local      ~/Documents -- -bash      ~ -- java - spark-shell      ...0/libexec/python -- -bash      +
HadoopVersion  PigVersion      UserId      StartedAt      FinishedAt      Features
2.8.1      0.16.0      Disha      2017-09-15 00:12:12      2017-09-15 00:12:14      ORDER_BY, FILTER, LIMIT

Success!

Job Stats (time in seconds):
JobId  Maps      Reduces  MaxMapTime      MinMapTime      AvgMapTime      MedianMapTime      MaxReduceTime      MinReduceTime      AvgReduceTime  M
edianReduceTime Alias      Feature  Outputs
job_local1170205723_0042      1      1      n/a      n/a      n/a      n/a      n/a      n/a      random1_descending      0
RDER_BY, COMBINER
job_local310883667_0043 1      1      n/a      n/a      n/a      n/a      n/a      n/a      random1_descending      /
Users/Disha/Documents/player1,
job_local381690916_0040 1      0      n/a      n/a      n/a      n/a      0      0      0      0      LOAD_DATA, random_include1, select
ed_list MAP_ONLY
job_local464497601_0041 1      1      n/a      n/a      n/a      n/a      n/a      n/a      random1_descending      SAMPLER

Input(s):
Successfully read 801 records from: "/Users/Disha/Downloads/Pokemon.csv"

Output(s):
Successfully stored 5 records in: "/Users/Disha/Documents/player1"

Counters:
Total records written : 5
Total bytes written : 0
Spillable Memory Manager spill count : 0
Total bags proactively spilled: 0
Total records proactively spilled: 0

Job DAG:
job_local381690916_0040 ->      job_local464497601_0041,
job_local464497601_0041 ->      job_local1170205723_0042,
job_local1170205723_0042      ->      job_local310883667_0043,
job_local310883667_0043

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2017-09-15 00:12:14,987 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
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2017-09-15 00:12:14,990 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized
2017-09-15 00:12:14,992 [main] INFO      org.apache.hadoop.metrics.jvm.JvmMetrics - Cannot initialize JVM Metrics with processName=JobTracke
r, sessionId= - already initialized

-rw-r--r--@ 1 Disha      staff      955982 Oct 5 2014 PA030141.jpg
-rw-r--r--@ 1 Disha      staff      1113021 Oct 6 2014 PA020123.jpg
-rw-r--r--@ 1 Disha      staff      1283796 Oct 6 2014 PA020124.jpg
-rw-r--r--@ 1 Disha      staff      1276627 Oct 6 2014 PA020129.jpg
-rw-r--r--@ 1 Disha      staff      833799 Oct 6 2014 PA020130.jpg
-rw-r--r--@ 1 Disha      staff      526209 Oct 6 2014 PA020131.jpg
-rw-r--r--@ 1 Disha      staff      762203 Oct 6 2014 PA030133.jpg
-rw-r--r--@ 1 Disha      staff      1247107 Oct 14 2014 P9300124.jpg
-rw-r--r--@ 1 Disha      staff      1028830 Oct 14 2014 P9300122.jpg
-rw-r--r--@ 1 Disha      staff      4794 Nov 4 2014 591af97c08310f34536038ccd39ce3f3.pdf
drwxr-xr-x 2 Disha      staff      68 Mar 5 2015 WebEx
drwxr-xr-x 11 Disha      staff      374 Sep 3 19:32 Bigdata_assignments
-rw-r--r--@ 1 Disha      staff      21247 Sep 3 23:39 HDFSArchitecture2.x.rtf
drwxr-xr-x 7 Disha      staff      238 Sep 3 23:51 acadgild.session3.assignment3.task1
drwxr-xr-x 7 Disha      staff      238 Sep 4 00:21 acadgild.session3.assignment3.task2
drwxr-xr-x 5 Disha      staff      170 Sep 4 11:03 session4.assignment1.task
-rw-r--r--@ 1 Disha      staff      10718 Sep 5 18:38 Session4.Assignment2.rtf
-rw-r--r--@ 1 Disha      staff      30667 Sep 5 18:41 session4.assignment3.rtf
-rw-r--r--@ 1 Disha      staff      3534 Sep 5 23:51 pig_commands.rtf
-rw-r--r--@ 1 Disha      staff      24635996 Sep 12 10:15 hadoopinpractice.pdf
-rw-r--r--@ 1 Disha      staff      6534 Sep 14 01:05 session5.assignment1.task1.rtf
drwxr-xr-x@ 7 Disha      staff      238 Sep 14 17:23 session5.assignment2.tasks.rtf
drwxr-xr-x 6 Disha      staff      204 Sep 15 00:12 player1
drwxr-xr-x@ 15 Disha      staff      510 Sep 15 00:13 session5.assignment3.task.rtf
[Chaitanyas-MacBook-Pro:Documents Disha$ cd player1/
[Chaitanyas-MacBook-Pro:player1 Disha$ s
-bash: s: command not found
[Chaitanyas-MacBook-Pro:player1 Disha$ ls
_SUCCESS      part-r-00000
[Chaitanyas-MacBook-Pro:player1 Disha$ cat part-r-00000
0.9959988490590517      Audino      Normal      445      103      60      86      60      86      50
0.9959973181892572      Volcarona      Bug      Fire      550      85      60      65      135      105      100
0.9938447760966546      Whimsicott      Grass      Fairy      480      60      67      85      77      75      116
0.9912808945092845      Gothorita      Psychic      390      60      45      70      75      85      55
0.9911995167672074      Solrock      Rock      Psychic      440      70      95      85      55      65      70
[Chaitanyas-MacBook-Pro:player1 Disha$

```