PIG USE CASE: POKEMON DATA ANALYSIS

BIG DATA
HADOOP
&
SPARK
TRAINING

ACADGILD

ASSIGNMENT
5.3

BY :-

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Associated Data Files

Pokemon.csv
https://drive.google.com/file/d/0ByJLBTmJojjzZTJQM2UzN2J6aUU/view

Note: - To solve the Assignment, I have created a VM with Ubuntu 16.04 OS and configured Hadoop 2.8.2 and pig-0.17.0 on the same

Put the dataset in HDFS location

```
sahil@ubuntu: ~/Desktop
sahil@ubuntu:~/Desktop$ hdfs dfs -mkdir /u01/hadoop/Pig/Pokemon_usecase
sahil@ubuntu:~/Desktop$ hdfs dfs -put Pokemon.csv /u01/hadoop/Pig/Pokemon_usecase
sahil@ubuntu:~/Desktop$ hdfs dfs -ls /u01/hadoop/Pig/Pokemon_usecase
Found 1 items
-rw-r--r--   1 sahil supergroup      37792 2017-12-05 13:13 /u01/hadoop/Pig/Pokemon_usecase/Pokemon.csv
sahil@ubuntu:~/Desktop$
sahil@ubuntu:~/Desktop$
```

Loading the data in Pig

```
sahil@ubuntu:~/Desktop$ pig -x mapreduce
17/12/05 13:49:06 INFO pig.ExecTypeProvider: Trying ExecType : LOCAL
17/12/05 13:49:06 INFO pig.ExecTypeProvider: Trying ExecType : MAPREDUCE
17/12/05 13:49:06 INFO pig.ExecTypeProvider: Picked MAPREDUCE as the ExecType
2017-12-05 13:49:06,841 [main] INFO  org.apache.pig.Main - Apache Pig version 0.17.0 (r1797386) compiled Jun 02 2017, 15:41:58
2017-12-05 13:49:06,842 [main] INFO  org.apache.pig.Main - Logging error messages to: /home/sahil/Desktop/pig_1512510546834.log
2017-12-05 13:49:06,873 [main] INFO  org.apache.pig.impl.util.Utils - Default bootup file /home/sahil/.pigbootup not found
2017-12-05 13:49:07,729 [main] INFO  org.apache.hadoop.conf.Configuration.deprecation - mapred.job.tracker is deprecated. Instead, use mapreduce.jobtracker.address
2017-12-05 13:49:07,729 [main] INFO  org.apache.pig.backend.hadoop.executionengine.HExecutionEngine - Connecting to hadoop file system at: hdfs://localhost:9000
2017-12-05 13:49:08,403 [main] INFO  org.apache.pig.PigServer - Pig Script ID for the session: PIG-default-c4b09986-058f-4241-ad47-ed539ddc9f8a
2017-12-05 13:49:08,403 [main] WARN  org.apache.pig.PigServer - ATS is disabled since yarn.timeline-service.enabled set to false
grunt> Load_Data = LOAD '/u01/hadoop/Pig/Pokemon_usecase/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);
grunt> describe Load_Data;
Load_Data: {Sno: int,Name: chararray,Type1: chararray,Type2: chararray,Total: int,HP: int,Attack: int,Defense: int,SpAtk: int,SpDef: int,Speed: int}
grunt>
```
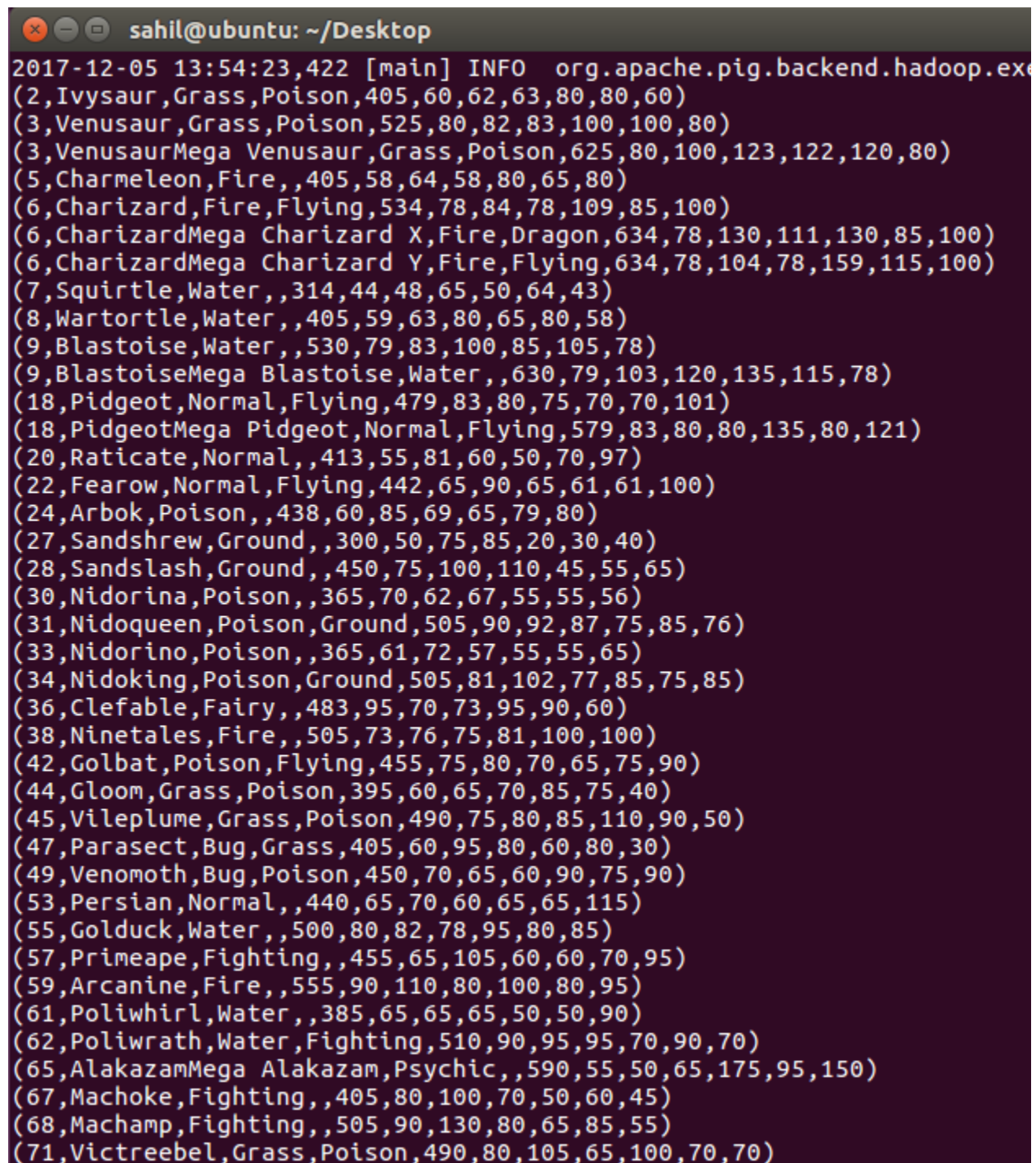
grunt> dump Load_Data;

```
sahil@ubuntu: ~/Desktop
2017-12-05 13:51:29,334 [main] INFO  org.apache.pig.backend.hadoop.ex
(,Name,Type 1,Type 2,,,,,,,)
(1,Bulbasaur,Grass,Poison,318,45,49,49,65,65,45)
(2,Ivysaur,Grass,Poison,405,60,62,63,80,80,60)
(3,Venusaur,Grass,Poison,525,80,82,83,100,100,80)
(3,VenusaurMega Venusaur,Grass,Poison,625,80,100,123,122,120,80)
(4,Charmander,Fire,,309,39,52,43,60,50,65)
(5,Charmeleon,Fire,,405,58,64,58,80,65,80)
(6,Charizard,Fire,Flying,534,78,84,78,109,85,100)
(6,CharizardMega Charizard X,Fire,Dragon,634,78,130,111,130,85,100)
(6,CharizardMega Charizard Y,Fire,Flying,634,78,104,78,159,115,100)
(7,Squirtle,Water,,314,44,48,65,50,64,43)
(8,Wartortle,Water,,405,59,63,80,65,80,58)
(9,Blastoise,Water,,530,79,83,100,85,105,78)
(9,BlastoiseMega Blastoise,Water,,630,79,103,120,135,115,78)
(10,Caterpie,Bug,,195,45,30,35,20,20,45)
(11,Metapod,Bug,,205,50,20,55,25,25,30)
(12,Butterfree,Bug,Flying,395,60,45,50,90,80,70)
(13,Weedle,Bug,Poison,195,40,35,30,20,20,50)
(14,Kakuna,Bug,Poison,205,45,25,50,25,25,35)
(15,Beedrill,Bug,Poison,395,65,90,40,45,80,75)
(15,BeedrillMega Beedrill,Bug,Poison,495,65,150,40,15,80,145)
(16,Pidgey,Normal,Flying,251,40,45,40,35,35,56)
(17,Pidgeotto,Normal,Flying,349,63,60,55,50,50,71)
(18,Pidgeot,Normal,Flying,479,83,80,75,70,70,101)
(18,PidgeotMega Pidgeot,Normal,Flying,579,83,80,80,135,80,121)
(19,Rattata,Normal,,253,30,56,35,25,35,72)
(20,Raticate,Normal,,413,55,81,60,50,70,97)
(21,Spearow,Normal,Flying,262,40,60,30,31,31,70)
(22,Fearow,Normal,Flying,442,65,90,65,61,61,100)
(23,Ekans,Poison,,288,35,60,44,40,54,55)
(24,Arbok,Poison,,438,60,85,69,65,79,80)
(25,Pikachu,Electric,,320,35,55,40,50,50,90)
(26,Raichu,Electric,,485,60,90,55,90,80,110)
(27,Sandshrew,Ground,,300,50,75,85,20,30,40)
(28,Sandslash,Ground,,450,75,100,110,45,55,65)
(29,Nidoran♀,Poison,,275,55,47,52,40,40,41)
(30,Nidorina,Poison,,365,70,62,67,55,55,56)
(31,Nidoqueen,Poison,Ground,505,90,92,87,75,85,76)
(32,Nidoran♂,Poison,,273,46,57,40,40,40,50)
```

Data got loaded into the Pig

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

Command
grunt> selected_list = FILTER Load_Data BY Defense>55;
grunt> dump selected_list;

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

```
⊗ ⊖ ⊡  sahil@ubuntu: ~/Desktop
2017-12-05 13:54:23,422 [main] INFO  org.apache.pig.backend.hadoop.exe
(2,Ivysaur,Grass,Poison,405,60,62,63,80,80,60)
(3,Venusaur,Grass,Poison,525,80,82,83,100,100,80)
(3,VenusaurMega Venusaur,Grass,Poison,625,80,100,123,122,120,80)
(5,Charmeleon,Fire,,405,58,64,58,80,65,80)
(6,Charizard,Fire,Flying,534,78,84,78,109,85,100)
(6,CharizardMega Charizard X,Fire,Dragon,634,78,130,111,130,85,100)
(6,CharizardMega Charizard Y,Fire,Flying,634,78,104,78,159,115,100)
(7,Squirtle,Water,,314,44,48,65,50,64,43)
(8,Wartortle,Water,,405,59,63,80,65,80,58)
(9,Blastoise,Water,,530,79,83,100,85,105,78)
(9,BlastoiseMega Blastoise,Water,,630,79,103,120,135,115,78)
(18,Pidgeot,Normal,Flying,479,83,80,75,70,70,101)
(18,PidgeotMega Pidgeot,Normal,Flying,579,83,80,80,135,80,121)
(20,Raticate,Normal,,413,55,81,60,50,70,97)
(22,Fearow,Normal,Flying,442,65,90,65,61,61,100)
(24,Arbok,Poison,,438,60,85,69,65,79,80)
(27,Sandshrew,Ground,,300,50,75,85,20,30,40)
(28,Sandslash,Ground,,450,75,100,110,45,55,65)
(30,Nidorina,Poison,,365,70,62,67,55,55,56)
(31,Nidoqueen,Poison,Ground,505,90,92,87,75,85,76)
(33,Nidorino,Poison,,365,61,72,57,55,55,65)
(34,Nidoking,Poison,Ground,505,81,102,77,85,75,85)
(36,Clefable,Fairy,,483,95,70,73,95,90,60)
(38,Ninetales,Fire,,505,73,76,75,81,100,100)
(42,Golbat,Poison,Flying,455,75,80,70,65,75,90)
(44,Gloom,Grass,Poison,395,60,65,70,85,75,40)
(45,Vileplume,Grass,Poison,490,75,80,85,110,90,50)
(47,Parasect,Bug,Grass,405,60,95,80,60,80,30)
(49,Venomoth,Bug,Poison,450,70,65,60,90,75,90)
(53,Persian,Normal,,440,65,70,60,65,65,115)
(55,Golduck,Water,,500,80,82,78,95,80,85)
(57,Primeape,Fighting,,455,65,105,60,60,70,95)
(59,Arcanine,Fire,,555,90,110,80,100,80,95)
(61,Poliwhirl,Water,,385,65,65,65,50,50,90)
(62,Poliwrath,Water,Fighting,510,90,95,95,70,90,70)
(65,AlakazamMega Alakazam,Psychic,,590,55,50,65,175,95,150)
(67,Machoke,Fighting,,405,80,100,70,50,60,45)
(68,Machamp,Fighting,,505,90,130,80,65,85,55)
(71,Victreebel,Grass,Poison,490,80,105,65,100,70,70)
```

Results:-

(2,Ivysaur,Grass,Poison,405,60,62,63,80,80,60)
(3,Venusaur,Grass,Poison,525,80,82,83,100,100,80)
(3,VenusaurMega Venusaur,Grass,Poison,625,80,100,123,122,120,80)
(5,Charmeleon,Fire,,405,58,64,58,80,65,80)
(6,Charizard,Fire,Flying,534,78,84,78,109,85,100)
(6,CharizardMega Charizard X,Fire,Dragon,634,78,130,111,130,85,100)
(6,CharizardMega Charizard Y,Fire,Flying,634,78,104,78,159,115,100)
(7,Squirtle,Water,,314,44,48,65,50,64,43)
(8,Wartortle,Water,,405,59,63,80,65,80,58)
(9,Blastoise,Water,,530,79,83,100,85,105,78)
(9,BlastoiseMega Blastoise,Water,,630,79,103,120,135,115,78)
(18,Pidgeot,Normal,Flying,479,83,80,75,70,70,101)
(18,PidgeotMega Pidgeot,Normal,Flying,579,83,80,80,135,80,121)
(20,Raticate,Normal,,413,55,81,60,50,70,97)
(22,Fearow,Normal,Flying,442,65,90,65,61,61,100)
(24,Arbok,Poison,,438,60,85,69,65,79,80)
(27,Sandshrew,Ground,,300,50,75,85,20,30,40)
(28,Sandslash,Ground,,450,75,100,110,45,55,65)
(30,Nidorina,Poison,,365,70,62,67,55,55,56)
(31,Nidoqueen,Poison,Ground,505,90,92,87,75,85,76)
(33,Nidorino,Poison,,365,61,72,57,55,55,65)
(34,Nidoking,Poison,Ground,505,81,102,77,85,75,85)
(36,Clefable,Fairy,,483,95,70,73,95,90,60)
(38,Ninetales,Fire,,505,73,76,75,81,100,100)
(42,Golbat,Poison,Flying,455,75,80,70,65,75,90)
(44,Gloom,Grass,Poison,395,60,65,70,85,75,40)
(45,Vileplume,Grass,Poison,490,75,80,85,110,90,50)
(47,Parasect,Bug,Grass,405,60,95,80,60,80,30)
(49,Venomoth,Bug,Poison,450,70,65,60,90,75,90)
(53,Persian,Normal,,440,65,70,60,65,65,115)
(55,Golduck,Water,,500,80,82,78,95,80,85)
(57,Primeape,Fighting,,455,65,105,60,60,70,95)
(59,Arcanine,Fire,,555,90,110,80,100,80,95)
(61,Poliwhirl,Water,,385,65,65,65,50,50,90)
(62,Poliwrath,Water,Fighting,510,90,95,95,70,90,70)
(65,AlakazamMega Alakazam,Psychic,,590,55,50,65,175,95,150)
(67,Machoke,Fighting,,405,80,100,70,50,60,45)
(68,Machamp,Fighting,,505,90,130,80,65,85,55)
(71,Victreebel,Grass,Poison,490,80,105,65,100,70,70)
(73,Tentacruel,Water,Poison,515,80,70,65,80,120,100)
(74,Geodude,Rock,Ground,300,40,80,100,30,30,20)
(75,Graveler,Rock,Ground,390,55,95,115,45,45,35)
(76,Golem,Rock,Ground,495,80,120,130,55,65,45)
(78,Rapidash,Fire,,500,65,100,70,80,80,105)
(79,Slowpoke,Water,Psychic,315,90,65,65,40,40,15)
(80,Slowbro,Water,Psychic,490,95,75,110,100,80,30)
(80,SlowbroMega Slowbro,Water,Psychic,590,95,75,180,130,80,30)
(81,Magnemite,Electric,Steel,325,25,35,70,95,55,45)
(82,Magneton,Electric,Steel,465,50,60,95,120,70,70)
(85,Dodrio,Normal,Flying,460,60,110,70,60,60,100)
(87,Dewgong,Water,Ice,475,90,70,80,70,95,70)
(89,Muk,Poison,,500,105,105,75,65,100,50)
(90,Shellder,Water,,305,30,65,100,45,25,40)
(91,Cloyster,Water,Ice,525,50,95,180,85,45,70)
(94,Gengar,Ghost,Poison,500,60,65,60,130,75,110)
(94,GengarMega Gengar,Ghost,Poison,600,60,65,80,170,95,130)
(95,Onix,Rock,Ground,385,35,45,160,30,45,70)
(97,Hypno,Psychic,,483,85,73,70,73,115,67)
(98,Krabby,Water,,325,30,105,90,25,25,50)
(99,Kingler,Water,,475,55,130,115,50,50,75)
(101,Electrode,Electric,,480,60,50,70,80,80,140)
(102,Exeggcute,Grass,Psychic,325,60,40,80,60,45,40)
(103,Exeggutor,Grass,Psychic,520,95,95,85,125,65,55)
(104,Cubone,Ground,,320,50,50,95,40,50,35)
(105,Marowak,Ground,,425,60,80,110,50,80,45)
(107,Hitmonchan,Fighting,,455,50,105,79,35,110,76)
(108,Lickitung,Normal,,385,90,55,75,60,75,30)
(109,Koffing,Poison,,340,40,65,95,60,45,35)
(110,Weezing,Poison,,490,65,90,120,85,70,60)
(111,Rhyhorn,Ground,Rock,345,80,85,95,30,30,25)
(112,Rhydon,Ground,Rock,485,105,130,120,45,45,40)
(114,Tangela,Grass,,435,65,55,115,100,40,60)
(115,Kangaskhan,Normal,,490,105,95,80,40,80,90)
(115,KangaskhanMega Kangaskhan,Normal,,590,105,125,100,60,100,100)
(116,Horsea,Water,,295,30,40,70,70,25,60)
(117,Seadra,Water,,440,55,65,95,95,45,85)
(118,Goldeen,Water,,320,45,67,60,35,50,63)
(119,Seaking,Water,,450,80,92,65,65,80,68)

(121,Starmie,Water,Psychic,520,60,75,85,100,85,115)
(122,Mr. Mime,Psychic,Fairy,460,40,45,65,100,120,90)
(123,Scyther,Bug,Flying,500,70,110,80,55,80,105)
(125,Electabuzz,Electric,,490,65,83,57,95,85,105)
(126,Magmar,Fire,,495,65,95,57,100,85,93)
(127,Pinsir,Bug,,500,65,125,100,55,70,85)
(127,PinsirMega Pinsir,Bug,Flying,600,65,155,120,65,90,105)
(128,Tauros,Normal,,490,75,100,95,40,70,110)
(130,Gyarados,Water,Flying,540,95,125,79,60,100,81)
(130,GyaradosMega Gyarados,Water,Dark,640,95,155,109,70,130,81)
(131,Lapras,Water,Ice,535,130,85,80,85,95,60)
(134,Vaporeon,Water,,525,130,65,60,110,95,65)
(135,Jolteon,Electric,,525,65,65,60,110,95,130)
(136,Flareon,Fire,,525,65,130,60,95,110,65)
(137,Porygon,Normal,,395,65,60,70,85,75,40)
(138,Omanyte,Rock,Water,355,35,40,100,90,55,35)
(139,Omastar,Rock,Water,495,70,60,125,115,70,55)
(140,Kabuto,Rock,Water,355,30,80,90,55,45,55)
(141,Kabutops,Rock,Water,495,60,115,105,65,70,80)
(142,Aerodactyl,Rock,Flying,515,80,105,65,60,75,130)
(142,AerodactylMega Aerodactyl,Rock,Flying,615,80,135,85,70,95,150)
(143,Snorlax,Normal,,540,160,110,65,65,110,30)
(144,Articuno,Ice,Flying,580,90,85,100,95,125,85)
(145,Zapdos,Electric,Flying,580,90,90,85,125,90,100)
(146,Moltres,Fire,Flying,580,90,100,90,125,85,90)
(148,Dragonair,Dragon,,420,61,84,65,70,70,70)
(149,Dragonite,Dragon,Flying,600,91,134,95,100,100,80)
(150,Mewtwo,Psychic,,680,106,110,90,154,90,130)
(150,MewtwoMega Mewtwo X,Psychic,Fighting,780,106,190,100,154,100,130)
(150,MewtwoMega Mewtwo Y,Psychic,,780,106,150,70,194,120,140)
(151,Mew,Psychic,,600,100,100,100,100,100,100)
(152,Chikorita,Grass,,318,45,49,65,49,65,45)
(153,Bayleef,Grass,,405,60,62,80,63,80,60)
(154,Meganium,Grass,,525,80,82,100,83,100,80)
(156,Quilava,Fire,,405,58,64,58,80,65,80)
(157,Typhlosion,Fire,,534,78,84,78,109,85,100)
(158,Totodile,Water,,314,50,65,64,44,48,43)
(159,Croconaw,Water,,405,65,80,80,59,63,58)
(160,Feraligatr,Water,,530,85,105,100,79,83,78)
(162,Furret,Normal,,415,85,76,64,45,55,90)
(168,Ariados,Bug,Poison,390,70,90,70,60,60,40)
(169,Crobat,Poison,Flying,535,85,90,80,70,80,130)
(171,Lanturn,Water,Electric,460,125,58,58,76,76,67)
(175,Togepi,Fairy,,245,35,20,65,40,65,20)
(176,Togetic,Fairy,Flying,405,55,40,85,80,105,40)
(178,Xatu,Psychic,Flying,470,65,75,70,95,70,95)
(181,Ampharos,Electric,,510,90,75,85,115,90,55)
(181,AmpharosMega Ampharos,Electric,Dragon,610,90,95,105,165,110,45)
(182,Bellossom,Grass,,490,75,80,95,90,100,50)
(184,Azumarill,Water,Fairy,420,100,50,80,60,80,50)
(185,Sudowoodo,Rock,,410,70,100,115,30,65,30)
(186,Politoed,Water,,500,90,75,75,90,100,70)
(189,Jumpluff,Grass,Flying,460,75,55,70,55,95,110)
(195,Quagsire,Water,Ground,430,95,85,85,65,65,35)
(196,Espeon,Psychic,,525,65,65,60,130,95,110)
(197,Umbreon,Dark,,525,95,65,110,60,130,65)
(199,Slowking,Water,Psychic,490,95,75,80,100,110,30)
(200,Misdreavus,Ghost,,435,60,60,60,85,85,85)
(202,Wobbuffet,Psychic,,405,190,33,58,33,58,33)
(203,Girafarig,Normal,Psychic,455,70,80,65,90,65,85)
(204,Pineco,Bug,,290,50,65,90,35,35,15)
(205,Forretress,Bug,Steel,465,75,90,140,60,60,40)
(206,Dunsparce,Normal,,415,100,70,70,65,65,45)
(207,Gligar,Ground,Flying,430,65,75,105,35,65,85)
(208,Steelix,Steel,Ground,510,75,85,200,55,65,30)
(208,SteelixMega Steelix,Steel,Ground,610,75,125,230,55,95,30)
(210,Granbull,Fairy,,450,90,120,75,60,60,45)
(211,Qwilfish,Water,Poison,430,65,95,75,55,55,85)
(212,Scizor,Bug,Steel,500,70,130,100,55,80,65)
(212,ScizorMega Scizor,Bug,Steel,600,70,150,140,65,100,75)
(213,Shuckle,Bug,Rock,505,20,10,230,10,230,5)
(214,Heracross,Bug,Fighting,500,80,125,75,40,95,85)
(214,HeracrossMega Heracross,Bug,Fighting,600,80,185,115,40,105,75)
(217,Ursaring,Normal,,500,90,130,75,75,75,55)
(219,Magcargo,Fire,Rock,410,50,50,120,80,80,30)
(221,Piloswine,Ice,Ground,450,100,100,80,60,60,50)
(222,Corsola,Water,Rock,380,55,55,85,65,85,35)
(224,Octillery,Water,,480,75,105,75,105,75,45)

(226,Mantine,Water,Flying,465,65,40,70,80,140,70)
(227,Skarmory,Steel,Flying,465,65,80,140,40,70,70)
(229,HoundoomMega Houndoom,Dark,Fire,600,75,90,90,140,90,115)
(230,Kingdra,Water,Dragon,540,75,95,95,95,95,85)
(231,Phanpy,Ground,,330,90,60,60,40,40,40)
(232,Donphan,Ground,,500,90,120,120,60,60,50)
(233,Porygon2,Normal,,515,85,80,90,105,95,60)
(234,Stantler,Normal,,465,73,95,62,85,65,85)
(237,Hitmontop,Fighting,,455,50,95,95,35,110,70)
(241,Miltank,Normal,,490,95,80,105,40,70,100)
(243,Raikou,Electric,,580,90,85,75,115,100,115)
(244,Entei,Fire,,580,115,115,85,90,75,100)
(245,Suicune,Water,,580,100,75,115,90,115,85)
(247,Pupitar,Rock,Ground,410,70,84,70,65,70,51)
(248,Tyranitar,Rock,Dark,600,100,134,110,95,100,61)
(248,TyranitarMega Tyranitar,Rock,Dark,700,100,164,150,95,120,71)
(249,Lugia,Psychic,Flying,680,106,90,130,90,154,110)
(250,Ho-oh,Fire,Flying,680,106,130,90,110,154,90)
(251,Celebi,Psychic,Grass,600,100,100,100,100,100,100)
(254,Sceptile,Grass,,530,70,85,65,105,85,120)
(254,SceptileMega Sceptile,Grass,Dragon,630,70,110,75,145,85,145)
(256,Combusken,Fire,Fighting,405,60,85,60,85,60,55)
(257,Blaziken,Fire,Fighting,530,80,120,70,110,70,80)
(257,BlazikenMega Blaziken,Fire,Fighting,630,80,160,80,130,80,100)
(259,Marshtomp,Water,Ground,405,70,85,70,60,70,50)
(260,Swampert,Water,Ground,535,100,110,90,85,90,60)
(260,SwampertMega Swampert,Water,Ground,635,100,150,110,95,110,70)
(262,Mightyena,Dark,,420,70,90,70,60,60,70)
(264,Linoone,Normal,,420,78,70,61,50,61,100)
(269,Dustox,Bug,Poison,385,60,50,70,50,90,65)
(272,Ludicolo,Water,Grass,480,80,70,70,90,100,70)
(275,Shiftry,Grass,Dark,480,90,100,60,90,60,80)
(277,Swellow,Normal,Flying,430,60,85,60,50,50,125)
(279,Pelipper,Water,Flying,430,60,50,100,85,70,65)
(282,Gardevoir,Psychic,Fairy,518,68,65,65,125,115,80)
(282,GardevoirMega Gardevoir,Psychic,Fairy,618,68,85,65,165,135,100)
(284,Masquerain,Bug,Flying,414,70,60,62,80,82,60)
(285,Shroomish,Grass,,295,60,40,60,40,60,35)
(286,Breloom,Grass,Fighting,460,60,130,80,60,60,70)
(287,Slakoth,Normal,,280,60,60,60,35,35,30)
(288,Vigoroth,Normal,,440,80,80,80,55,55,90)
(289,Slaking,Normal,,670,150,160,100,95,65,100)
(290,Nincada,Bug,Ground,266,31,45,90,30,30,40)
(295,Exploud,Normal,,490,104,91,63,91,73,68)
(297,Hariyama,Fighting,,474,144,120,60,40,60,50)
(299,Nosepass,Rock,,375,30,45,135,45,90,30)
(301,Delcatty,Normal,,380,70,65,65,55,55,70)
(302,Sableye,Dark,Ghost,380,50,75,75,65,65,50)
(302,SableyeMega Sableye,Dark,Ghost,480,50,85,125,85,115,20)
(303,Mawile,Steel,Fairy,380,50,85,85,55,55,50)
(303,MawileMega Mawile,Steel,Fairy,480,50,105,125,55,95,50)
(304,Aron,Steel,Rock,330,50,70,100,40,40,30)
(305,Lairon,Steel,Rock,430,60,90,140,50,50,40)
(306,Aggron,Steel,Rock,530,70,110,180,60,60,50)
(306,AggronMega Aggron,Steel,,630,70,140,230,60,80,50)
(308,Medicham,Fighting,Psychic,410,60,60,75,60,75,80)
(308,MedichamMega Medicham,Fighting,Psychic,510,60,100,85,80,85,100)
(310,Manectric,Electric,,475,70,75,60,105,60,105)
(310,ManectricMega Manectric,Electric,,575,70,75,80,135,80,135)
(317,Swalot,Poison,,467,100,73,83,73,83,55)
(319,SharpedoMega Sharpedo,Water,Dark,560,70,140,70,110,65,105)
(323,Camerupt,Fire,Ground,460,70,100,70,105,75,40)
(323,CameruptMega Camerupt,Fire,Ground,560,70,120,100,145,105,20)
(324,Torkoal,Fire,,470,70,85,140,85,70,20)
(326,Grumpig,Psychic,,470,80,45,65,90,110,80)
(327,Spinda,Normal,,360,60,60,60,60,60,60)
(330,Flygon,Ground,Dragon,520,80,100,80,80,80,100)
(332,Cacturne,Grass,Dark,475,70,115,60,115,60,55)
(333,Swablu,Normal,Flying,310,45,40,60,40,75,50)
(334,Altaria,Dragon,Flying,490,75,70,90,70,105,80)
(334,AltariaMega Altaria,Dragon,Fairy,590,75,110,110,110,105,80)
(335,Zangoose,Normal,,458,73,115,60,60,60,90)
(336,Seviper,Poison,,458,73,100,60,100,60,65)
(337,Lunatone,Rock,Psychic,440,70,55,65,95,85,70)
(338,Solrock,Rock,Psychic,440,70,95,85,55,65,70)
(340,Whiscash,Water,Ground,468,110,78,73,76,71,60)
(341,Corphish,Water,,308,43,80,65,50,35,35)
(342,Crawdaunt,Water,Dark,468,63,120,85,90,55,55)

(344,Claydol,Ground,Psychic,500,60,70,105,70,120,75)
(345,Lileep,Rock,Grass,355,66,41,77,61,87,23)
(346,Cradily,Rock,Grass,495,86,81,97,81,107,43)
(348,Armaldo,Rock,Bug,495,75,125,100,70,80,45)
(350,Milotic,Water,,540,95,60,79,100,125,81)
(351,Castform,Normal,,420,70,70,70,70,70,70)
(352,Kecleon,Normal,,440,60,90,70,60,120,40)
(354,Banette,Ghost,,455,64,115,65,83,63,65)
(354,BanetteMega Banette,Ghost,,555,64,165,75,93,83,75)
(355,Duskull,Ghost,,295,20,40,90,30,90,25)
(356,Dusclops,Ghost,,455,40,70,130,60,130,25)
(357,Tropius,Grass,Flying,460,99,68,83,72,87,51)
(358,Chimecho,Psychic,,425,65,50,70,95,80,65)
(359,Absol,Dark,,465,65,130,60,75,60,75)
(359,AbsolMega Absol,Dark,,565,65,150,60,115,60,115)
(362,Glalie,Ice,,480,80,80,80,80,80,80)
(362,GlalieMega Glalie,Ice,,580,80,120,80,120,80,100)
(364,Sealeo,Ice,Water,410,90,60,70,75,70,45)
(365,Walrein,Ice,Water,530,110,80,90,95,90,65)
(366,Clamperl,Water,,345,35,64,85,74,55,32)
(367,Huntail,Water,,485,55,104,105,94,75,52)
(368,Gorebyss,Water,,485,55,84,105,114,75,52)
(369,Relicanth,Water,Rock,485,100,90,130,45,65,55)
(371,Bagon,Dragon,,300,45,75,60,40,30,50)
(372,Shelgon,Dragon,,420,65,95,100,60,50,50)
(373,Salamence,Dragon,Flying,600,95,135,80,110,80,100)
(373,SalamenceMega Salamence,Dragon,Flying,700,95,145,130,120,90,120)
(374,Beldum,Steel,Psychic,300,40,55,80,35,60,30)
(375,Metang,Steel,Psychic,420,60,75,100,55,80,50)
(376,Metagross,Steel,Psychic,600,80,135,130,95,90,70)
(376,MetagrossMega Metagross,Steel,Psychic,700,80,145,150,105,110,110)
(377,Regirock,Rock,,580,80,100,200,50,100,50)
(378,Regice,Ice,,580,80,50,100,100,200,50)
(379,Registeel,Steel,,580,80,75,150,75,150,50)
(380,Latias,Dragon,Psychic,600,80,80,90,110,130,110)
(380,LatiasMega Latias,Dragon,Psychic,700,80,100,120,140,150,110)
(381,Latios,Dragon,Psychic,600,80,90,80,130,110,110)
(381,LatiosMega Latios,Dragon,Psychic,700,80,130,100,160,120,110)
(382,Kyogre,Water,,670,100,100,90,150,140,90)
(382,KyogrePrimal Kyogre,Water,,770,100,150,90,180,160,90)
(383,Groudon,Ground,,670,100,150,140,100,90,90)
(383,GroudonPrimal Groudon,Ground,Fire,770,100,180,160,150,90,90)
(384,Rayquaza,Dragon,Flying,680,105,150,90,150,90,95)
(384,RayquazaMega Rayquaza,Dragon,Flying,780,105,180,100,180,100,115)
(385,Jirachi,Steel,Psychic,600,100,100,100,100,100,100)
(386,DeoxysDefense Forme,Psychic,,600,50,70,160,70,160,90)
(386,DeoxysSpeed Forme,Psychic,,600,50,95,90,95,90,180)
(387,Turtwig,Grass,,318,55,68,64,45,55,31)
(388,Grotle,Grass,,405,75,89,85,55,65,36)
(389,Torterra,Grass,Ground,525,95,109,105,75,85,56)
(392,Infernape,Fire,Fighting,534,76,104,71,104,71,108)
(394,Prinplup,Water,,405,64,66,68,81,76,50)
(395,Empoleon,Water,Steel,530,84,86,88,111,101,60)
(398,Staraptor,Normal,Flying,485,85,120,70,50,60,100)
(400,Bibarel,Normal,Water,410,79,85,60,55,60,71)
(405,Luxray,Electric,,523,80,120,79,95,79,70)
(407,Roserade,Grass,Poison,515,60,70,65,125,105,90)
(409,Rampardos,Rock,,495,97,165,60,65,50,58)
(410,Shieldon,Rock,Steel,350,30,42,118,42,88,30)
(411,Bastiodon,Rock,Steel,495,60,52,168,47,138,30)
(413,WormadamPlant Cloak,Bug,Grass,424,60,59,85,79,105,36)
(413,WormadamSandy Cloak,Bug,Ground,424,60,79,105,59,85,36)
(413,WormadamTrash Cloak,Bug,Steel,424,60,69,95,69,95,36)
(416,Vespiquen,Bug,Flying,474,70,80,102,80,102,40)
(417,Pachirisu,Electric,,405,60,45,70,45,90,95)
(421,Cherrim,Grass,,450,70,60,70,87,78,85)
(423,Gastrodon,Water,Ground,475,111,83,68,92,82,39)
(424,Ambipom,Normal,,482,75,100,66,60,66,115)
(428,Lopunny,Normal,,480,65,76,84,54,96,105)
(428,LopunnyMega Lopunny,Normal,Fighting,580,65,136,94,54,96,135)
(429,Mismagius,Ghost,,495,60,60,60,105,105,105)
(432,Purugly,Normal,,452,71,82,64,64,59,112)
(435,Skuntank,Poison,Dark,479,103,93,67,71,61,84)
(436,Bronzor,Steel,Psychic,300,57,24,86,24,86,23)
(437,Bronzong,Steel,Psychic,500,67,89,116,79,116,33)
(438,Bonsly,Rock,,290,50,80,95,10,45,10)
(442,Spiritomb,Ghost,Dark,485,50,92,108,92,108,35)
(444,Gabite,Dragon,Ground,410,68,90,65,50,55,82)

(445,Garchomp,Dragon,Ground,600,108,130,95,80,85,102)
(445,GarchompMega Garchomp,Dragon,Ground,700,108,170,115,120,95,92)
(448,Lucario,Fighting,Steel,525,70,110,70,115,70,90)
(448,LucarioMega Lucario,Fighting,Steel,625,70,145,88,140,70,112)
(449,Hippopotas,Ground,,330,68,72,78,38,42,32)
(450,Hippowdon,Ground,,525,108,112,118,68,72,47)
(451,Skorupi,Poison,Bug,330,40,50,90,30,55,65)
(452,Drapion,Poison,Dark,500,70,90,110,60,75,95)
(454,Toxicroak,Poison,Fighting,490,83,106,65,86,65,85)
(455,Carnivine,Grass,,454,74,100,72,90,72,46)
(456,Finneon,Water,,330,49,49,56,49,61,66)
(457,Lumineon,Water,,460,69,69,76,69,86,91)
(460,Abomasnow,Grass,Ice,494,90,92,75,92,85,60)
(460,AbomasnowMega Abomasnow,Grass,Ice,594,90,132,105,132,105,30)
(461,Weavile,Dark,Ice,510,70,120,65,45,85,125)
(462,Magnezone,Electric,Steel,535,70,70,115,130,90,60)
(463,Lickilicky,Normal,,515,110,85,95,80,95,50)
(464,Rhyperior,Ground,Rock,535,115,140,130,55,55,40)
(465,Tangrowth,Grass,,535,100,100,125,110,50,50)
(466,Electivire,Electric,,540,75,123,67,95,85,95)
(467,Magmortar,Fire,,540,75,95,67,125,95,83)
(468,Togekiss,Fairy,Flying,545,85,50,95,120,115,80)
(469,Yanmega,Bug,Flying,515,86,76,86,116,56,95)
(470,Leafeon,Grass,,525,65,110,130,60,65,95)
(471,Glaceon,Ice,,525,65,60,110,130,95,65)
(472,Gliscor,Ground,Flying,510,75,95,125,45,75,95)
(473,Mamoswine,Ice,Ground,530,110,130,80,70,60,80)
(474,Porygon-Z,Normal,,535,85,80,70,135,75,90)
(475,Gallade,Psychic,Fighting,518,68,125,65,65,115,80)
(475,GalladeMega Gallade,Psychic,Fighting,618,68,165,95,65,115,110)
(476,Probopass,Rock,Steel,525,60,55,145,75,150,40)
(477,Dusknoir,Ghost,,525,45,100,135,65,135,45)
(478,Froslass,Ice,Ghost,480,70,80,70,80,70,110)
(479,Rotom,Electric,Ghost,440,50,50,77,95,77,91)
(479,RotomHeat Rotom,Electric,Fire,520,50,65,107,105,107,86)
(479,RotomWash Rotom,Electric,Water,520,50,65,107,105,107,86)
(479,RotomFrost Rotom,Electric,Ice,520,50,65,107,105,107,86)
(479,RotomFan Rotom,Electric,Flying,520,50,65,107,105,107,86)
(479,RotomMow Rotom,Electric,Grass,520,50,65,107,105,107,86)
(480,Uxie,Psychic,,580,75,75,130,75,130,95)
(481,Mesprit,Psychic,,580,80,105,105,105,105,80)
(482,Azelf,Psychic,,580,75,125,70,125,70,115)
(483,Dialga,Steel,Dragon,680,100,120,120,150,100,90)
(484,Palkia,Water,Dragon,680,90,120,100,150,120,100)
(485,Heatran,Fire,Steel,600,91,90,106,130,106,77)
(486,Regigigas,Normal,,670,110,160,110,80,110,100)
(487,GiratinaAltered Forme,Ghost,Dragon,680,150,100,120,100,120,90)
(487,GiratinaOrigin Forme,Ghost,Dragon,680,150,120,100,120,100,90)
(488,Cresselia,Psychic,,600,120,70,120,75,130,85)
(489,Phione,Water,,480,80,80,80,80,80,80)
(490,Manaphy,Water,,600,100,100,100,100,100,100)
(491,Darkrai,Dark,,600,70,90,90,135,90,125)
(492,ShayminLand Forme,Grass,,600,100,100,100,100,100,100)
(492,ShayminSky Forme,Grass,Flying,600,100,103,75,120,75,127)
(493,Arceus,Normal,,720,120,120,120,120,120,120)
(494,Victini,Psychic,Fire,600,100,100,100,100,100,100)
(496,Servine,Grass,,413,60,60,75,60,75,83)
(497,Serperior,Grass,,528,75,75,95,75,95,113)
(500,Emboar,Fire,Fighting,528,110,123,65,100,65,65)
(502,Dewott,Water,,413,75,75,60,83,60,60)
(503,Samurott,Water,,528,95,100,85,108,70,70)
(505,Watchog,Normal,,420,60,85,69,60,69,77)
(507,Herdier,Normal,,370,65,80,65,35,65,60)
(508,Stoutland,Normal,,500,85,110,90,45,90,80)
(512,Simisage,Grass,,498,75,98,63,98,63,101)
(514,Simisear,Fire,,498,75,98,63,98,63,101)
(516,Simipour,Water,,498,75,98,63,98,63,101)
(518,Musharna,Psychic,,487,116,55,85,107,95,29)
(520,Tranquill,Normal,Flying,358,62,77,62,50,42,65)
(521,Unfezant,Normal,Flying,488,80,115,80,65,55,93)
(523,Zebstrika,Electric,,497,75,100,63,80,63,116)
(524,Roggenrola,Rock,,280,55,75,85,25,25,15)
(525,Boldore,Rock,,390,70,105,105,50,40,20)
(526,Gigalith,Rock,,515,85,135,130,60,80,25)
(530,Excadrill,Ground,Steel,508,110,135,60,50,65,88)
(531,Audino,Normal,,445,103,60,86,60,86,50)
(531,AudinoMega Audino,Normal,Fairy,545,103,60,126,80,126,50)
(533,Gurdurr,Fighting,,405,85,105,85,40,50,40)

(534,Conkeldurr,Fighting,,505,105,140,95,55,65,45)
(537,Seismitoad,Water,Ground,509,105,95,75,85,75,74)
(538,Throh,Fighting,,465,120,100,85,30,85,45)
(539,Sawk,Fighting,,465,75,125,75,30,75,85)
(540,Sewaddle,Bug,Grass,310,45,53,70,40,60,42)
(541,Swadloon,Bug,Grass,380,55,63,90,50,80,42)
(542,Leavanny,Bug,Grass,500,75,103,80,70,80,92)
(543,Venipede,Bug,Poison,260,30,45,59,30,39,57)
(544,Whirlipede,Bug,Poison,360,40,55,99,40,79,47)
(545,Scolipede,Bug,Poison,485,60,100,89,55,69,112)
(546,Cottonee,Grass,Fairy,280,40,27,60,37,50,66)
(547,Whimsicott,Grass,Fairy,480,60,67,85,77,75,116)
(549,Lilligant,Grass,,480,70,60,75,110,75,90)
(550,Basculin,Water,,460,70,92,65,80,55,98)
(553,Krookodile,Ground,Dark,519,95,117,80,65,70,92)
(555,DarmanitanZen Mode,Fire,Psychic,540,105,30,105,140,105,55)
(556,Maractus,Grass,,461,75,86,67,106,67,60)
(557,Dwebble,Bug,Rock,325,50,65,85,35,35,55)
(558,Crustle,Bug,Rock,475,70,95,125,65,75,45)
(559,Scraggy,Dark,Fighting,348,50,75,70,35,70,48)
(560,Scrafty,Dark,Fighting,488,65,90,115,45,115,58)
(561,Sigilyph,Psychic,Flying,490,72,58,80,103,80,97)
(562,Yamask,Ghost,,303,38,30,85,55,65,30)
(563,Cofagrigus,Ghost,,483,58,50,145,95,105,30)
(564,Tirtouga,Water,Rock,355,54,78,103,53,45,22)
(565,Carracosta,Water,Rock,495,74,108,133,83,65,32)
(567,Archeops,Rock,Flying,567,75,140,65,112,65,110)
(568,Trubbish,Poison,,329,50,50,62,40,62,65)
(569,Garbodor,Poison,,474,80,95,82,60,82,75)
(571,Zoroark,Dark,,510,60,105,60,120,60,105)
(573,Cinccino,Normal,,470,75,95,60,65,60,115)
(575,Gothorita,Psychic,,390,60,45,70,75,85,55)
(576,Gothitelle,Psychic,,490,70,55,95,95,110,65)
(579,Reuniclus,Psychic,,490,110,65,75,125,85,30)
(581,Swanna,Water,Flying,473,75,87,63,87,63,98)
(583,Vanillish,Ice,,395,51,65,65,80,75,59)
(584,Vanilluxe,Ice,,535,71,95,85,110,95,79)
(586,Sawsbuck,Normal,Grass,475,80,100,70,60,70,95)
(587,Emolga,Electric,Flying,428,55,75,60,75,60,103)
(589,Escavalier,Bug,Steel,495,70,135,105,60,105,20)
(591,Amoonguss,Grass,Poison,464,114,85,70,85,80,30)
(593,Jellicent,Water,Ghost,480,100,60,70,85,105,60)
(594,Alomomola,Water,,470,165,75,80,40,45,65)
(596,Galvantula,Bug,Electric,472,70,77,60,97,60,108)
(597,Ferroseed,Grass,Steel,305,44,50,91,24,86,10)
(598,Ferrothorn,Grass,Steel,489,74,94,131,54,116,20)
(599,Klink,Steel,,300,40,55,70,45,60,30)
(600,Klang,Steel,,440,60,80,95,70,85,50)
(601,Klinklang,Steel,,520,60,100,115,70,85,90)
(603,Eelektrik,Electric,,405,65,85,70,75,70,40)
(604,Eelektross,Electric,,515,85,115,80,105,80,50)
(606,Beheeyem,Psychic,,485,75,75,75,125,95,40)
(608,Lampent,Ghost,Fire,370,60,40,60,95,60,55)
(609,Chandelure,Ghost,Fire,520,60,55,90,145,90,80)
(610,Axew,Dragon,,320,46,87,60,30,40,57)
(611,Fraxure,Dragon,,410,66,117,70,40,50,67)
(612,Haxorus,Dragon,,540,76,147,90,60,70,97)
(614,Beartic,Ice,,485,95,110,80,70,80,50)
(616,Shelmet,Bug,,305,50,40,85,40,65,25)
(618,Stunfisk,Ground,Electric,471,109,66,84,81,99,32)
(620,Mienshao,Fighting,,510,65,125,60,95,60,105)
(621,Druddigon,Dragon,,485,77,120,90,60,90,48)
(623,Golurk,Ground,Ghost,483,89,124,80,55,80,55)
(624,Pawniard,Dark,Steel,340,45,85,70,40,40,60)
(625,Bisharp,Dark,Steel,490,65,125,100,60,70,70)
(626,Bouffalant,Normal,,490,95,110,95,40,95,55)
(628,Braviary,Normal,Flying,510,100,123,75,57,75,80)
(629,Vullaby,Dark,Flying,370,70,55,75,45,65,60)
(630,Mandibuzz,Dark,Flying,510,110,65,105,55,95,80)
(631,Heatmor,Fire,,484,85,97,66,105,66,65)
(632,Durant,Bug,Steel,484,58,109,112,48,48,109)
(634,Zweilous,Dark,Dragon,420,72,85,70,65,70,58)
(635,Hydreigon,Dark,Dragon,600,92,105,90,125,90,98)
(637,Volcarona,Bug,Fire,550,85,60,65,135,105,100)
(638,Cobalion,Steel,Fighting,580,91,90,129,90,72,108)
(639,Terrakion,Rock,Fighting,580,91,129,90,72,90,108)
(640,Virizion,Grass,Fighting,580,91,90,72,90,129,108)
(641,TornadusIncarnate Forme,Flying,,580,79,115,70,125,80,111)

(641,TornadusTherian Forme,Flying,,580,79,100,80,110,90,121)
(642,ThundurusIncarnate Forme,Electric,Flying,580,79,115,70,125,80,111)
(642,ThundurusTherian Forme,Electric,Flying,580,79,105,70,145,80,101)
(643,Reshiram,Dragon,Fire,680,100,120,100,150,120,90)
(644,Zekrom,Dragon,Electric,680,100,150,120,120,100,90)
(645,LandorusIncarnate Forme,Ground,Flying,600,89,125,90,115,80,101)
(645,LandorusTherian Forme,Ground,Flying,600,89,145,90,105,80,91)
(646,Kyurem,Dragon,Ice,660,125,130,90,130,90,95)
(646,KyuremBlack Kyurem,Dragon,Ice,700,125,170,100,120,90,95)
(646,KyuremWhite Kyurem,Dragon,Ice,700,125,120,90,170,100,95)
(647,KeldeoOrdinary Forme,Water,Fighting,580,91,72,90,129,90,108)
(647,KeldeoResolute Forme,Water,Fighting,580,91,72,90,129,90,108)
(648,MeloettaAria Forme,Normal,Psychic,600,100,77,77,128,128,90)
(648,MeloettaPirouette Forme,Normal,Fighting,600,100,128,90,77,77,128)
(649,Genesect,Bug,Steel,600,71,120,95,120,95,99)
(650,Chespin,Grass,,313,56,61,65,48,45,38)
(651,Quilladin,Grass,,405,61,78,95,56,58,57)
(52,Chesnaught,Grass,Fighting,530,88,107,122,74,75,64)
(654,Braixen,Fire,,409,59,59,58,90,70,73)
(655,Delphox,Fire,Psychic,534,75,69,72,114,100,104)
(658,Greninja,Water,Dark,530,72,95,67,103,71,122)
(660,Diggersby,Normal,Ground,423,85,56,77,50,77,78)
(663,Talonflame,Fire,Flying,499,78,81,71,74,69,126)
(665,Spewpa,Bug,,213,45,22,60,27,30,29)
(667,Litleo,Fire,Normal,369,62,50,58,73,54,72)
(668,Pyroar,Fire,Normal,507,86,68,72,109,66,106)
(671,Florges,Fairy,,552,78,65,68,112,154,75)
(673,Gogoat,Grass,,531,123,100,62,97,81,68)
(674,Pancham,Fighting,,348,67,82,62,46,48,43)
(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)

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

Command
grunt> gourp_selcted_list = Group selected_list All;
grunt> count_selcted_list = foreach gourp_selcted_list GENERATE COUNT(selected_list);
grunt> dump count_selcted_list;

```
grunt> selected_list = FILTER Load_Data BY Defense>55;
grunt> gourp_selcted_list = Group selected_list All;
grunt> count_selcted_list = foreach gourp_selcted_list GENERATE COUNT(selected_list);
grunt> dump count_selcted_list;
```

Result:-

```
2017-12-05 13:43:39,230 [main] INFO  org.apache.hadoop.yarn.client.RMProxy - Connecting to ResourceManager at /0.0.0.0:8032
2017-12-05 13:43:39,240 [main] INFO  org.apache.hadoop.mapred.ClientServiceDelegate - Application state is completed. FinalApplicationStatus=SUCC
EEDED. Redirecting to job history server
2017-12-05 13:43:39,298 [main] INFO  org.apache.hadoop.yarn.client.RMProxy - Connecting to ResourceManager at /0.0.0.0:8032
2017-12-05 13:43:39,303 [main] INFO  org.apache.hadoop.mapred.ClientServiceDelegate - Application state is completed. FinalApplicationStatus=SUCC
EEDED. Redirecting to job history server
2017-12-05 13:43:39,388 [main] INFO  org.apache.hadoop.yarn.client.RMProxy - Connecting to ResourceManager at /0.0.0.0:8032
2017-12-05 13:43:39,395 [main] INFO  org.apache.hadoop.mapred.ClientServiceDelegate - Application state is completed. FinalApplicationStatus=SUCC
EEDED. Redirecting to job history server
2017-12-05 13:43:39,470 [main] WARN  org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Encountered Warning FIELD_D
ISCARDED_TYPE_CONVERSION_FAILED 5 time(s).
2017-12-05 13:43:39,471 [main] INFO  org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Success!
2017-12-05 13:43:39,475 [main] INFO  org.apache.pig.data.SchemaTupleBackend - Key [pig.schematuple] was not set... will not generate code.
2017-12-05 13:43:39,537 [main] INFO  org.apache.hadoop.mapreduce.lib.input.FileInputFormat - Total input files to process : 1
2017-12-05 13:43:39,537 [main] INFO  org.apache.pig.backend.hadoop.executionengine.util.MapRedUtil - Total input paths to process : 1
(544)
grunt>
```

(544)

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

Command

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

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

Result:-

```
sahil@ubuntu: ~/Desktop
2017-12-05 14:01:24,364 [main] INFO  org.apache.hadoop.mapreduce.lib.input.FileInputFormat - Total input files to process : 1
2017-12-05 14:01:24,364 [main] INFO  org.apache.pig.backend.hadoop.executionengine.util.MapRedUtil - Total input paths to process : 1
(0.295908767208945,Ivysaur,Grass,Poison,405,60,62,63,80,80,60)
(0.3670168317133483,Venusaur,Grass,Poison,525,80,82,83,100,100,80)
(0.6906237967099998,VenusaurMega Venusaur,Grass,Poison,625,80,100,123,122,120,80)
(0.23567670763003878,Charmeleon,Fire,,405,58,64,58,80,65,80)
(0.312594510245694,Charizard,Fire,Flying,534,78,84,78,109,85,100)
(0.5239523106166185,CharizardMega Charizard X,Fire,Dragon,634,78,130,111,130,85,100)
(0.4302882523065894,CharizardMega Charizard Y,Fire,Flying,634,78,104,78,159,115,100)
(0.7026913808135962,Squirtle,Water,,314,44,48,65,50,64,43)
(0.22790045425977556,Wartortle,Water,,405,59,63,80,65,80,58)
(0.9260642643820685,Blastoise,Water,,530,79,83,100,85,105,78)
(0.016002545188762984,BlastoiseMega Blastoise,Water,,630,79,103,120,135,115,78)
(0.10152869109911855,Pidgeot,Normal,Flying,479,83,80,75,70,70,101)
(0.4904807625727091,PidgeotMega Pidgeot,Normal,Flying,579,83,80,80,135,80,121)
(0.24901390183728678,Raticate,Normal,,413,55,81,60,50,70,97)
(0.10459325698382038,Fearow,Normal,Flying,442,65,90,65,61,61,100)
(0.413821937420635,Arbok,Poison,,438,60,85,69,65,79,80)
(0.941303001497838,Sandshrew,Ground,,300,50,75,85,20,30,40)
(0.408459788726791,Sandslash,Ground,,450,75,100,110,45,55,65)
(0.029810751524732115,Nidorina,Poison,,365,70,62,67,55,55,56)
(0.4413648606048166,Nidoqueen,Poison,Ground,505,90,92,87,75,85,76)
(0.07676633989124015,Nidorino,Poison,,365,61,72,57,55,55,65)
(0.4571835595531667,Nidoking,Poison,Ground,505,81,102,77,85,75,85)
(0.8299549500899545,Clefable,Fairy,,483,95,70,73,95,90,60)
(0.11644597591386152,Ninetales,Fire,,505,73,76,75,81,100,100)
(0.2769388002788643,Golbat,Poison,Flying,455,75,80,70,65,75,90)
(0.5253151392043682,Gloom,Grass,Poison,395,60,65,70,85,75,40)
(0.13541119216720776,Vileplume,Grass,Poison,490,75,80,85,110,90,50)
(0.47236282032272336,Parasect,Bug,Grass,405,60,95,80,60,80,30)
(0.4137396736193609,Venomoth,Bug,Poison,450,70,65,60,90,75,90)
(0.3134534137628223,Persian,Normal,,440,65,70,60,65,65,115)
(0.5228161048254758,Golduck,Water,,500,80,82,78,95,80,85)
(0.18283833038527741,Primeape,Fighting,,455,65,105,60,60,70,95)
(0.582993347294889,Arcanine,Fire,,555,90,110,80,100,80,95)
(0.704142629067545,Poliwhirl,Water,,385,65,65,65,50,50,90)
(0.28729983328952713,Poliwrath,Water,Fighting,510,90,95,95,70,90,70)
(0.275350158100389,AlakazamMega Alakazam,Psychic,,590,55,50,65,175,95,150)
(0.31463386386145886,Machoke,Fighting,,405,80,100,70,50,60,45)
(0.6440789545651256,Machamp,Fighting,,505,90,130,80,65,85,55)
```

(0.295908767208945,Ivysaur,Grass,Poison,405,60,62,63,80,80,60)
(0.3670168317133483,Venusaur,Grass,Poison,525,80,82,83,100,100,80)
(0.6906237967099998,VenusaurMega Venusaur,Grass,Poison,625,80,100,123,122,120,80)
(0.23567670763003878,Charmeleon,Fire,,405,58,64,58,80,65,80)
(0.3125945102456942,Charizard,Fire,Flying,534,78,84,78,109,85,100)
(0.5239523106166185,CharizardMega Charizard X,Fire,Dragon,634,78,130,111,130,85,100)
(0.4302882523065894,CharizardMega Charizard Y,Fire,Flying,634,78,104,78,159,115,100)
(0.7026913808135962,Squirtle,Water,,314,44,48,65,50,64,43)
(0.22790045425977556,Wartortle,Water,,405,59,63,80,65,80,58)
(0.9260642643820685,Blastoise,Water,,530,79,83,100,85,105,78)
(0.016002545188762984,BlastoiseMega Blastoise,Water,,630,79,103,120,135,115,78)
(0.10152869109911855,Pidgeot,Normal,Flying,479,83,80,75,70,70,101)
(0.4904807625727091,PidgeotMega Pidgeot,Normal,Flying,579,83,80,80,135,80,121)
(0.24901390183728678,Raticate,Normal,,413,55,81,60,50,70,97)
(0.10459325698382038,Fearow,Normal,Flying,442,65,90,65,61,61,100)
(0.413821937420635,Arbok,Poison,,438,60,85,69,65,79,80)
(0.941303001497838,Sandshrew,Ground,,300,50,75,85,20,30,40)
(0.408459788726791,Sandslash,Ground,,450,75,100,110,45,55,65)
(0.029810751524732115,Nidorina,Poison,,365,70,62,67,55,55,56)
(0.4413648606048166,Nidoqueen,Poison,Ground,505,90,92,87,75,85,76)
(0.07676633989124015,Nidorino,Poison,,365,61,72,57,55,55,65)
(0.4571835595531667,Nidoking,Poison,Ground,505,81,102,77,85,75,85)
(0.8299549500899545,Clefable,Fairy,,483,95,70,73,95,90,60)
(0.11644597591386152,Ninetales,Fire,,505,73,76,75,81,100,100)
(0.2769388002788643,Golbat,Poison,Flying,455,75,80,70,65,75,90)
(0.5253151392043682,Gloom,Grass,Poison,395,60,65,70,85,75,40)
(0.13541119216720776,Vileplume,Grass,Poison,490,75,80,85,110,90,50)
(0.47236282032272336,Parasect,Bug,Grass,405,60,95,80,60,80,30)
(0.4137396736193609,Venomoth,Bug,Poison,450,70,65,60,90,75,90)
(0.3134534137628223,Persian,Normal,,440,65,70,60,65,65,115)
(0.5228161048254758,Golduck,Water,,500,80,82,78,95,80,85)
(0.18283833038527741,Primeape,Fighting,,455,65,105,60,60,70,95)
(0.582993347294889,Arcanine,Fire,,555,90,110,80,100,80,95)
(0.704142629067545,Poliwhirl,Water,,385,65,65,65,50,50,90)
(0.28729983328952713,Poliwrath,Water,Fighting,510,90,95,95,70,90,70)
(0.275350158100389,AlakazamMega Alakazam,Psychic,,590,55,50,65,175,95,150)
(0.31463386386145886,Machoke,Fighting,,405,80,100,70,50,60,45)
(0.6440789545651256,Machamp,Fighting,,505,90,130,80,65,85,55)
(0.7102281026030332,Victreebel,Grass,Poison,490,80,105,65,100,70,70)
(0.3509231195603524,Tentacruel,Water,Poison,515,80,70,65,80,120,100)
(0.5069397000821171,Geodude,Rock,Ground,300,40,80,100,30,30,20)
(0.5675852264078091,Graveler,Rock,Ground,390,55,95,115,45,45,35)
(0.8070933587819099,Golem,Rock,Ground,495,80,120,130,55,65,45)
(0.4017237089381852,Rapidash,Fire,,500,65,100,70,80,80,105)

(0.5035308962285021,Slowpoke,Water,Psychic,315,90,65,65,40,40,15)
(0.2813065614682254,Slowbro,Water,Psychic,490,95,75,110,100,80,30)
(0.22868152372070227,SlowbroMega Slowbro,Water,Psychic,590,95,75,180,130,80,30)
(0.1078350098489591,Magnemite,Electric,Steel,325,25,35,70,95,55,45)
(0.1859615512836905I,Magneton,Electric,Steel,465,50,60,95,120,70,70)
(0.410743047964081556,Dodrio,Normal,Flying,460,60,110,70,60,60,100)
(0.4583669495078426,Dewgong,Water,Ice,475,90,70,80,70,95,70)
(0.3158791605073624,Muk,Poison,,500,105,105,75,65,100,50)
(0.6900924560785217,Shellder,Water,,305,30,65,100,45,25,40)
(0.22115031879767433,Cloyster,Water,Ice,525,50,95,180,85,45,70)
(0.6993649863874682,Gengar,Ghost,Poison,500,60,65,60,130,75,110)
(0.25469365756751927,GengarMega Gengar,Ghost,Poison,600,60,65,80,170,95,130)
(0.37103078827822045,Onix,Rock,Ground,385,35,45,160,30,45,70)
(0.868502175933269,Hypno,Psychic,,483,85,73,70,73,115,67)
(0.877998200899236,Krabby,Water,,325,30,105,90,25,25,50)
(0.9270570223566502,Kingler,Water,,475,55,130,115,50,50,75)
(0.939273768350958,Electrode,Electric,,480,60,50,70,80,80,140)
(0.9106244191831548,Exeggcute,Grass,Psychic,325,60,40,80,60,45,40)
(0.002508398710251325,Exeggutor,Grass,Psychic,520,95,95,85,125,65,55)
(0.03149788283757071,Cubone,Ground,,320,50,50,95,40,50,35)
(0.26979679794461264,Marowak,Ground,,425,60,80,110,50,80,45)
(0.214272123976508808,Hitmonchan,Fighting,,455,50,105,79,35,110,76)
(0.711673844551261I,Lickitung,Normal,,385,90,55,75,60,75,30)
(0.7145114759223553,Koffing,Poison,,340,40,65,95,60,45,35)
(0.2461765819694287,Weezing,Poison,,490,65,90,120,85,70,60)
(0.23083740122389174,Rhyhorn,Ground,Rock,345,80,85,95,30,30,25)
(0.22346704529690609,Rhydon,Ground,Rock,485,105,130,120,45,45,40)
(0.43104562475178165,Tangela,Grass,,435,65,55,115,100,40,60)
(0.14344209059722168,Kangaskhan,Normal,,490,105,95,80,40,80,90)
(0.9815383717471869,KangaskhanMega Kangaskhan,Normal,,590,105,125,100,60,100,100)
(0.051215227947326025,Horsea,Water,,295,30,40,70,70,25,60)
(0.1999081791473687,Seadra,Water,,440,55,65,95,95,45,85)
(0.4761973917104386,Goldeen,Water,,320,45,67,60,35,50,63)
(0.9923543519488373,Seaking,Water,,450,80,92,65,65,80,68)
(0.7932025166223414,Starmie,Water,Psychic,520,60,75,85,100,85,115)
(0.5807862079608836,Mr. Mime,Psychic,Fairy,460,40,45,65,100,120,90)
(0.9426622124802154,Scyther,Bug,Flying,500,70,110,80,55,80,105)
(0.849635988660767I,Electabuzz,Electric,,490,65,83,57,95,85,105)
(0.021378763489679597,Magmar,Fire,,495,65,95,57,100,85,93)
(0.7708572522513936,Pinsir,Bug,,500,65,125,100,55,70,85)
(0.08062759020729582,PinsirMega Pinsir,Bug,Flying,600,65,155,120,65,90,105)
(0.009233362564552166,Tauros,Normal,,490,75,100,95,40,70,110)
(0.7958170145708667,Gyarados,Water,Flying,540,95,125,79,60,100,81)
(0.3215107393045462,GyaradosMega Gyarados,Water,Dark,640,95,155,109,70,130,81)
(0.5179251857700484,Lapras,Water,Ice,535,130,85,80,85,95,60)
(0.9851507736830718,Vaporeon,Water,,525,130,65,60,110,95,65)
(0.61378803857358S3,Jolteon,Electric,,525,65,65,60,110,95,130)
(0.10948797294322243,Flareon,Fire,,525,65,130,60,95,110,65)
(0.2478612928094669,Porygon,Normal,,395,65,60,70,85,75,40)
(0.06814393400217345,Omanyte,Rock,Water,355,35,40,100,90,55,35)
(0.6657969603455501,Omastar,Rock,Water,495,70,60,125,115,70,55)
(0.361787350904183557,Kabuto,Rock,Water,355,30,80,90,55,45,55)
(0.18916682507255222,Kabutops,Rock,Water,495,60,115,105,65,70,80)
(0.2803539691099691,Aerodactyl,Rock,Flying,515,80,105,65,60,75,130)
(0.11565320928468403,AerodactylMega Aerodactyl,Rock,Flying,615,80,135,85,70,95,150)
(0.7299709531319569,Snorlax,Normal,,540,160,110,65,65,110,30)
(0.4003674758125688,Articuno,Ice,Flying,580,90,85,100,95,125,85)
(0.35896829208177494,Zapdos,Electric,Flying,580,90,90,85,125,90,100)
(0.747622415805943,Moltres,Fire,Flying,580,90,100,90,125,85,90)
(0.6370472648029074,Dragonair,Dragon,,420,61,84,65,70,70,70)
(0.710078675906727,Dragonite,Dragon,Flying,600,91,134,95,100,100,80)
(0.18007710177498326,Mewtwo,Psychic,,680,106,110,90,154,90,130)
(0.7309343620069074,MewtwoMega Mewtwo X,Psychic,Fighting,780,106,190,100,154,100,130)
(0.3788945712971604,MewtwoMega Mewtwo Y,Psychic,,780,106,150,70,194,120,140)
(0.1975824613518773,Mew,Psychic,,600,100,100,100,100,100,100)
(0.18330118916272153,Chikorita,Grass,,318,45,49,65,49,65,45)
(0.4403985498987617,Bayleef,Grass,,405,60,62,80,63,80,60)
(0.752227851678231,Meganium,Grass,,525,80,82,100,83,100,80)
(0.9121441856476674,Quilava,Fire,,405,58,64,58,80,65,80)
(0.0384327786897651355,Typhlosion,Fire,,534,78,84,78,109,85,100)
(0.24160506901759038,Totodile,Water,,314,50,65,64,44,48,43)
(0.3024014847289008,Croconaw,Water,,405,65,80,80,59,63,58)
(0.45487906909958065,Feraligatr,Water,,530,85,105,100,79,83,78)
(0.0072448058630742995,Furret,Normal,,415,85,76,64,45,55,90)
(0.9001651322516608,Ariados,Bug,Poison,390,70,90,70,60,60,40)
(0.63687924730861I6,Crobat,Poison,Flying,535,85,90,80,70,80,130)
(0.5635798685157526,Lanturn,Water,Electric,460,125,58,58,76,76,67)
(0.19678819171963286,Togepi,Fairy,,245,35,20,65,40,65,20)

(0.8066721294531469,Togetic,Fairy,Flying,405,55,40,85,80,105,40)
(0.6339916754227057,Xatu,Psychic,Flying,470,65,75,70,95,70,95)
(0.6387686692243358,Ampharos,Electric,,510,90,75,85,115,90,55)
(0.17491104146384762,AmpharosMega Ampharos,Electric,Dragon,610,90,95,105,165,110,45)
(0.5225407251789412,Bellossom,Grass,,490,75,80,95,90,100,50)
(0.7916405130549097,Azumarill,Water,Fairy,420,100,50,80,60,80,50)
(0.2283373060525289,Sudowoodo,Rock,,410,70,100,115,30,65,30)
(0.2243970614415628,Politoed,Water,,500,90,75,75,90,100,70)
(0.24660802719576502,Jumpluff,Grass,Flying,460,75,55,70,55,95,110)
(0.40689839773277414,Quagsire,Water,Ground,430,95,85,85,65,65,35)
(0.848492404599293,Espeon,Psychic,,525,65,65,60,130,95,110)
(0.8490352399035468,Umbreon,Dark,,525,95,65,110,60,130,65)
(0.6783573848059753,Slowking,Water,Psychic,490,95,75,80,100,110,30)
(0.7549917177733517,Misdreavus,Ghost,,435,60,60,60,85,85,85)
(0.16032269251635267,Wobbuffet,Psychic,,405,190,33,58,33,58,33)
(0.0130966663028135835,Girafarig,Normal,Psychic,455,70,80,65,90,65,85)
(0.41085210451506315,Pineco,Bug,,290,50,65,90,35,35,15)
(0.9449428780714364,Forretress,Bug,Steel,465,75,90,140,60,60,40)
(0.44415785397004526,Dunsparce,Normal,,415,100,70,70,65,65,45)
(0.9951080132809471,Gligar,Ground,Flying,430,65,75,105,35,65,85)
(0.4249425202094498,Steelix,Steel,Ground,510,75,85,200,55,65,30)
(0.6691880242786151,SteelixMega Steelix,Steel,Ground,610,75,125,230,55,95,30)
(0.5179896250771906,Granbull,Fairy,,450,90,120,75,60,60,45)
(0.6674761038890724,Qwilfish,Water,Poison,430,65,95,75,55,55,85)
(0.4760370500703893,Scizor,Bug,Steel,500,70,130,100,55,80,65)
(0.6357745296389787,ScizorMega Scizor,Bug,Steel,600,70,150,140,65,100,75)
(0.73157730721111251,Shuckle,Bug,Rock,505,20,10,230,10,230,5)
(0.47543129720748956,Heracross,Bug,Fighting,500,80,125,75,40,95,85)
(0.1657038333303891867,HeracrossMega Heracross,Bug,Fighting,600,80,185,115,40,105,75)
(0.07428240364277605,Ursaring,Normal,,500,90,130,75,75,75,55)
(0.4344619152988689,Magcargo,Fire,Rock,410,50,50,120,80,80,30)
(0.38192181791110274,Piloswine,Ice,Ground,450,100,100,80,60,60,50)
(0.2725964691397088,Corsola,Water,Rock,380,55,55,85,65,85,35)
(0.34040240581955,Octillery,Water,,480,75,105,75,105,75,45)
(0.363963961635406,Mantine,Water,Flying,465,65,40,70,80,140,70)
(0.5695051784073168,Skarmory,Steel,Flying,465,65,80,140,40,70,70)
(0.480673815153412,HoundoomMega Houndoom,Dark,Fire,600,75,90,90,140,90,115)
(0.3091426357656815,Kingdra,Water,Dragon,540,75,95,95,95,95,85)
(0.7283423378550079,Phanpy,Ground,,330,90,60,60,40,40,40)
(0.7459469750185023,Donphan,Ground,,500,90,120,120,60,60,50)
(0.9874103060441141,Porygon2,Normal,,515,85,80,90,105,95,60)
(0.9429247073281636,Stantler,Normal,,465,73,95,62,85,65,85)
(0.37064232224373883,Hitmontop,Fighting,,455,50,95,95,35,110,70)
(0.48715126382787455,Miltank,Normal,,490,95,80,105,40,70,100)
(0.60066699875089145,Raikou,Electric,,580,90,85,75,115,100,115)
(0.1483695547784386,Entei,Fire,,580,115,115,85,90,75,100)
(0.2903635937780321,Suicune,Water,,580,100,75,115,90,115,85)
(0.1692107336436396,Pupitar,Rock,Ground,410,70,84,70,65,70,51)
(0.8401438940844828,Tyranitar,Rock,Dark,600,100,134,110,95,100,61)
(0.79436199984111889,TyranitarMega Tyranitar,Rock,Dark,700,100,164,150,95,120,71)
(0.9729289286146682,Lugia,Psychic,Flying,680,106,90,130,90,154,110)
(0.6907793775282598,Ho-oh,Fire,Flying,680,106,130,90,110,154,90)
(0.2477269480485261 3,Celebi,Psychic,Grass,600,100,100,100,100,100,100)
(0.5540221306608297,Sceptile,Grass,,530,70,85,65,105,85,120)
(0.4310379480798757,SceptileMega Sceptile,Grass,Dragon,630,70,110,75,145,85,145)
(0.36763369955163316,Combusken,Fire,Fighting,405,60,85,60,85,60,55)
(0.580937261398287,Blaziken,Fire,Fighting,530,80,120,70,110,70,80)
(0.0545009048286221 3,BlazikenMega Blaziken,Fire,Fighting,630,80,160,80,130,80,100)
(0.5973398179814275,Marshtomp,Water,Ground,405,70,85,70,60,70,50)
(0.09320337695998793,Swampert,Water,Ground,535,100,110,90,85,90,60)
(0.8144569259211799,SwampertMega Swampert,Water,Ground,635,100,150,110,95,110,70)
(0.6710560848633694,Mightyena,Dark,,420,70,90,70,60,60,70)
(0.724461662581583,Linoone,Normal,,420,78,70,61,50,61,100)
(0.10201573467635494,Dustox,Bug,Poison,385,60,50,70,50,90,65)
(0.9071006990210784,Ludicolo,Water,Grass,480,80,70,70,90,100,70)
(0.18565412159253303,Shiftry,Grass,Dark,480,90,100,60,90,60,80)
(0.7462808695477998,Swellow,Normal,Flying,430,60,85,60,50,50,125)
(0.4474126588405174,Pelipper,Water,Flying,430,60,50,100,85,70,65)
(0.1049944701964759,Gardevoir,Psychic,Fairy,518,68,65,65,125,115,80)
(0.44538210070171635,GardevoirMega Gardevoir,Psychic,Fairy,618,68,85,65,165,135,100)
(0.13343019950268153,Masquerain,Bug,Flying,414,70,60,62,80,82,60)
(0.6105627401832527,Shroomish,Grass,,295,60,40,60,40,60,35)
(0.146472988592653,Breloom,Grass,Fighting,460,60,130,80,60,60,70)
(0.10224341667644077,Slakoth,Normal,,280,60,60,60,35,35,30)
(0.6363773278313339,Vigoroth,Normal,,440,80,80,80,55,55,90)
(0.49470543680685,Slaking,Normal,,670,150,160,100,95,65,100)
(0.110182156666601905,Nincada,Bug,Ground,266,31,45,90,30,30,40)
(0.4934498718290693,Exploud,Normal,,490,104,91,63,91,73,68)

(0.45102106915617135,Hariyama,Fighting,,474,144,120,60,40,60,50)
(0.4267279688182539,Nosepass,Rock,,375,30,45,135,45,90,30)
(0.805098363047646,Delcatty,Normal,,380,70,65,65,55,55,70)
(0.7301113862832905,Sableye,Dark,Ghost,380,50,75,75,65,65,50)
(0.7645986724372463,SableyeMega Sableye,Dark,Ghost,480,50,85,125,85,115,20)
(0.6875900108722572,Mawile,Steel,Fairy,380,50,85,85,55,55,50)
(0.5396531122621732,MawileMega Mawile,Steel,Fairy,480,50,105,125,55,95,50)
(0.10226438482972977,Aron,Steel,Rock,330,50,70,100,40,40,30)
(0.3437999471227178,Lairon,Steel,Rock,430,60,90,140,50,50,40)
(0.5237748856404986,Aggron,Steel,Rock,530,70,110,180,60,60,50)
(0.8268787690939152,AggronMega Aggron,Steel,,630,70,140,230,60,80,50)
(0.9794685609634569,Medicham,Fighting,Psychic,410,60,60,75,60,75,80)
(0.8123352587113661,MedichamMega Medicham,Fighting,Psychic,510,60,100,85,80,85,100)
(0.5538605653588669,Manectric,Electric,,475,70,75,60,105,60,105)
(0.08346677129804447,ManectricMega Manectric,Electric,,575,70,75,80,135,80,135)
(0.48874043337076944,Swalot,Poison,,467,100,73,83,73,83,55)
(0.5318067479853764,SharpedoMega Sharpedo,Water,Dark,560,70,140,70,110,65,105)
(0.9774673035609938,Camerupt,Fire,Ground,460,70,100,70,105,75,40)
(0.6628572142458176,CameruptMega Camerupt,Fire,Ground,560,70,120,100,145,105,20)
(0.38538215734618353,Torkoal,Fire,,470,70,85,140,85,70,20)
(0.547582725312101,Grumpig,Psychic,,470,80,45,65,90,110,80)
(0.018253275744904984,Spinda,Normal,,360,60,60,60,60,60,60)
(0.6259541771496651,Flygon,Ground,Dragon,520,80,100,80,80,80,100)
(0.6973018866146922,Cacturne,Grass,Dark,475,70,115,60,115,60,55)
(0.8904776013734048,Swablu,Normal,Flying,310,45,40,60,40,75,50)
(0.588293194386821,Altaria,Dragon,Flying,490,75,70,90,70,105,80)
(0.49778895348025454,AltariaMega Altaria,Dragon,Fairy,590,75,110,110,110,105,80)
(0.9197123085759991,Zangoose,Normal,,458,73,115,60,60,60,90)
(0.6353907049084917,Seviper,Poison,,458,73,100,60,100,60,65)
(0.24808940266035873,Lunatone,Rock,Psychic,440,70,55,65,95,85,70)
(0.88442886360458,Solrock,Rock,Psychic,440,70,95,85,55,65,70)
(0.7646317763852768,Whiscash,Water,Ground,468,110,78,73,76,71,60)
(0.5096592013296506,Corphish,Water,,308,43,80,65,50,35,35)
(0.15462852019117745,Crawdaunt,Water,Dark,468,63,120,85,90,55,55)
(0.23165639514013914,Claydol,Ground,Psychic,500,60,70,105,70,120,75)
(0.7284025774164183,Lileep,Rock,Grass,355,66,41,77,61,87,23)
(0.5167318563960717,Cradily,Rock,Grass,495,86,81,97,81,107,43)
(0.8393113844378538,Armaldo,Rock,Bug,495,75,125,100,70,80,45)
(0.19541996477393653,Milotic,Water,,540,95,60,79,100,125,81)
(0.03047947992033051,Castform,Normal,,420,70,70,70,70,70,70)
(0.9948716759157472,Kecleon,Normal,,440,60,90,70,60,120,40)
(0.3382472398397264,Banette,Ghost,,455,64,115,65,83,63,65)
(0.06378408627238585,BanetteMega Banette,Ghost,,555,64,165,75,93,83,75)
(0.7980304719237619,Duskull,Ghost,,295,20,40,90,30,90,25)
(0.7659475685730869,Dusclops,Ghost,,455,40,70,130,60,130,25)
(0.4093182860775467,Tropius,Grass,Flying,460,99,68,83,72,87,51)
(0.42108320781266695,Chimecho,Psychic,,425,65,50,70,95,80,65)
(0.7234314277819884,Absol,Dark,,465,65,130,60,75,60,75)
(0.5459761723981253,AbsolMega Absol,Dark,,565,65,150,60,115,60,115)
(0.3135836790313412,Glalie,Ice,,480,80,80,80,80,80,80)
(0.7772101562139784,GlalieMega Glalie,Ice,,580,80,120,80,120,80,100)
(0.8055246856970145,Sealeo,Ice,Water,410,90,60,70,75,70,45)
(0.5869266591425972,Walrein,Ice,Water,530,110,80,90,95,90,65)
(0.9130068022973402,Clamperl,Water,,345,35,64,85,74,55,32)
(0.19844668321402403,Huntail,Water,,485,55,104,105,94,75,52)
(0.20055124867984098,Gorebyss,Water,,485,55,84,105,114,75,52)
(0.5984035656993919,Relicanth,Water,Rock,485,100,90,130,45,65,55)
(0.6421536943552029,Bagon,Dragon,,300,45,75,60,40,30,50)
(0.0709701986336061,Shelgon,Dragon,,420,65,95,100,60,50,50)
(0.654954924167589,Salamence,Dragon,Flying,600,95,135,80,110,80,100)
(0.35817302410224094,SalamenceMega Salamence,Dragon,Flying,700,95,145,130,120,90,120)
(0.248423986262706,Beldum,Steel,Psychic,300,40,55,80,35,60,30)
(0.0041471139782867095,Metang,Steel,Psychic,420,60,75,100,55,80,50)
(0.4697959372397157,Metagross,Steel,Psychic,600,80,135,130,95,90,70)
(0.0621004780075034,MetagrossMega Metagross,Steel,Psychic,700,80,145,150,105,110,110)
(0.06354070796362621,Regirock,Rock,,580,80,100,200,50,100,50)
(0.5379502018104216,Regice,Ice,,580,80,50,100,100,200,50)
(0.45530082286807605,Registeel,Steel,,580,80,75,150,75,150,50)
(0.3869189711691171,Latias,Dragon,Psychic,600,80,80,90,110,130,110)
(0.9684382518447141,LatiasMega Latias,Dragon,Psychic,700,80,100,120,140,150,110)
(0.7573133321573785,Latios,Dragon,Psychic,600,80,90,80,130,110,110)
(0.8741140533309435,LatiosMega Latios,Dragon,Psychic,700,80,130,100,160,120,110)
(0.443348652148378,Kyogre,Water,,670,100,100,90,150,140,90)
(0.14435300610966972,KyogrePrimal Kyogre,Water,,770,100,150,90,180,160,90)
(0.1359643806975441 13,Groudon,Ground,,670,100,150,140,100,90,90)
(0.9431061544199744,GroudonPrimal Groudon,Ground,Fire,770,100,180,160,150,90,90)
(0.2824400060370539,Rayquaza,Dragon,Flying,680,105,150,90,150,90,95)
(0.16483441121861642,RayquazaMega Rayquaza,Dragon,Flying,780,105,180,100,180,100,115)

(0.9332526766246367,Jirachi,Steel,Psychic,600,100,100,100,100,100,100)
(0.06613236762158214,DeoxysDefense Forme,Psychic,,600,50,70,160,70,160,90)
(0.3846143509053278,DeoxysSpeed Forme,Psychic,,600,50,95,90,95,90,180)
(0.9765584005006492,Turtwig,Grass,,318,55,68,64,45,55,31)
(0.2497145280024189,Grotle,Grass,,405,75,89,85,55,65,36)
(0.6039243756940678,Torterra,Grass,Ground,525,95,109,105,75,85,56)
(0.6087276188492007,Infernape,Fire,Fighting,534,76,104,71,104,71,108)
(0.8412396309277141,Prinplup,Water,,405,64,66,68,81,76,50)
(0.41059711742902294,Empoleon,Water,Steel,530,84,86,88,111,101,60)
(0.6523371780412651,Staraptor,Normal,Flying,485,85,120,70,50,60,100)
(0.40758360881492606,Bibarel,Normal,Water,410,79,85,60,55,60,71)
(0.36660256376022093,Luxray,Electric,,523,80,120,79,95,79,70)
(0.6912867601834619,Roserade,Grass,Poison,515,60,70,65,125,105,90)
(0.9964621216653726,Rampardos,Rock,,495,97,165,60,65,50,58)
(0.7266761898605018,Shieldon,Rock,Steel,350,30,42,118,42,88,30)
(0.341285762751005005,Bastiodon,Rock,Steel,495,60,52,168,47,138,30)
(0.5245650515510102,WormadamPlant Cloak,Bug,Grass,424,60,59,85,79,105,36)
(0.13565624243456986,WormadamSandy Cloak,Bug,Ground,424,60,79,105,59,85,36)
(0.894539807469886,WormadamTrash Cloak,Bug,Steel,424,60,69,95,69,95,36)
(0.20671745832512145,Vespiquen,Bug,Flying,474,70,80,102,80,102,40)
(0.2368423426502404,Pachirisu,Electric,,405,60,45,70,45,90,95)
(0.03332660055877634,Cherrim,Grass,,450,70,60,70,87,78,85)
(0.9859404052107958,Gastrodon,Water,Ground,475,111,83,68,92,82,39)
(0.6484152230722984,Ambipom,Normal,,482,75,100,66,60,66,115)
(0.048994927218927065,Lopunny,Normal,,480,65,76,84,54,96,105)
(0.0353483334395536196,LopunnyMega Lopunny,Normal,Fighting,580,65,136,94,54,96,135)
(0.593239914942191,Mismagius,Ghost,,495,60,60,60,105,105,105)
(0.969825775188458,Purugly,Normal,,452,71,82,64,64,59,112)
(0.54715844771149158,Skuntank,Poison,Dark,479,103,93,67,71,61,84)
(0.2222832509381328,Bronzor,Steel,Psychic,300,57,24,86,24,86,23)
(0.6766191155185838,Bronzong,Steel,Psychic,500,67,89,116,79,116,33)
(0.6237358100331697,Bonsly,Rock,,290,50,80,95,10,45,10)
(0.0798072451002013,Spiritomb,Ghost,Dark,485,50,92,108,92,108,35)
(0.313105570354410647,Gabite,Dragon,Ground,410,68,90,65,50,55,82)
(0.18044528665591112,Garchomp,Dragon,Ground,600,108,130,95,80,85,102)
(0.5194479582778285,GarchompMega Garchomp,Dragon,Ground,700,108,170,115,120,95,92)
(0.569675268819255,Lucario,Fighting,Steel,525,70,110,70,115,70,90)
(0.12192989100640528,LucarioMega Lucario,Fighting,Steel,625,70,145,88,140,70,112)
(0.4009224081958217,Hippopotas,Ground,,330,68,72,78,38,42,32)
(0.4983312223867695,Hippowdon,Ground,,525,108,112,118,68,72,47)
(0.04255104137095311,Skorupi,Poison,Bug,330,40,50,90,30,55,65)
(0.4842759395882107,Drapion,Poison,Dark,500,70,90,110,60,75,95)
(0.6692637334142655,Toxicroak,Poison,Fighting,490,83,106,65,86,65,85)
(0.6760177681330689,Carnivine,Grass,,454,74,100,72,90,72,46)
(0.769705918228249,Finneon,Water,,330,49,49,56,49,61,66)
(0.5156937133190734,Lumineon,Water,,460,69,69,76,69,86,91)
(0.7749775058188135,Abomasnow,Grass,Ice,494,90,92,75,92,85,60)
(0.1864335112498351,AbomasnowMega Abomasnow,Grass,Ice,594,90,132,105,132,105,30)
(0.2966909613977483,Weavile,Dark,Ice,510,70,120,65,45,85,125)
(0.04311128208981707,Magnezone,Electric,Steel,535,70,70,115,130,90,60)
(0.695458671944788,Lickilicky,Normal,,515,110,85,95,80,95,50)
(0.23101296812248695,Rhyperior,Ground,Rock,535,115,140,130,55,55,40)
(0.7884648538584605,Tangrowth,Grass,,535,100,100,125,110,50,50)
(0.058057154012676415,Electivire,Electric,,540,75,123,67,95,85,95)
(0.6209304328189141,Magmortar,Fire,,540,75,95,67,125,95,83)
(0.23586337185252126,Togekiss,Fairy,Flying,545,85,50,95,120,115,80)
(0.05929134940485314,Yanmega,Bug,Flying,515,86,76,86,116,56,95)
(0.08094761696744823,Leafeon,Grass,,525,65,110,130,60,65,95)
(0.96788195191116624,Glaceon,Ice,,525,65,60,110,130,95,65)
(0.3503070049059944,Gliscor,Ground,Flying,510,75,95,125,45,75,95)
(0.37557170181111506,Mamoswine,Ice,Ground,530,110,130,80,70,60,80)
(0.3969190568059555,Porygon-Z,Normal,,535,85,80,70,135,75,90)
(0.05949895106941039,Gallade,Psychic,Fighting,518,68,125,65,65,115,80)
(0.48214487156310937,GalladeMega Gallade,Psychic,Fighting,618,68,165,95,65,115,110)
(0.620753738534211,Probopass,Rock,Steel,525,60,55,145,75,150,40)
(0.22622380392096209,Dusknoir,Ghost,,525,45,100,135,65,135,45)
(0.4181864355289441,Froslass,Ice,Ghost,480,70,80,70,80,70,110)
(0.5581483781427042,Rotom,Electric,Ghost,440,50,50,77,95,77,91)
(0.6936862576338199,RotomHeat Rotom,Electric,Fire,520,50,65,107,105,107,86)
(0.02599748125045387,RotomWash Rotom,Electric,Water,520,50,65,107,105,107,86)
(0.16313380348983664,RotomFrost Rotom,Electric,Ice,520,50,65,107,105,107,86)
(0.7227008565624353,RotomFan Rotom,Electric,Flying,520,50,65,107,105,107,86)
(0.07526347377429254,RotomMow Rotom,Electric,Grass,520,50,65,107,105,107,86)
(0.2852448369740709,Uxie,Psychic,,580,75,75,130,75,130,95)
(0.8349745139418057,Mesprit,Psychic,,580,80,105,105,105,105,80)
(0.7431734446892134,Azelf,Psychic,,580,75,125,70,125,70,115)
(0.34293112320089925,Dialga,Steel,Dragon,680,100,120,120,150,100,90)
(0.37117994218864414,Palkia,Water,Dragon,680,90,120,100,150,120,100)

(0.07994375879351256,Heatran,Fire,Steel,600,91,90,106,130,106,77)
(0.977534925640256,Regigigas,Normal,,670,110,160,110,80,110,100)
(0.038602410941312115,GiratinaAltered Forme,Ghost,Dragon,680,150,100,120,100,120,90)
(0.21259593926491127,GiratinaOrigin Forme,Ghost,Dragon,680,150,120,100,120,100,90)
(0.017539105896099194,Cresselia,Psychic,,600,120,70,120,75,130,85)
(0.8778591795390406,Phione,Water,,480,80,80,80,80,80,80)
(0.7027582463197373,Manaphy,Water,,600,100,100,100,100,100,100)
(0.8647280929981473,Darkrai,Dark,,600,70,90,90,135,90,125)
(0.7885413251362056,ShayminLand Forme,Grass,,600,100,100,100,100,100,100)
(0.1528066828749275,ShayminSky Forme,Grass,Flying,600,100,103,75,120,75,127)
(0.0759833273521 1821,Arceus,Normal,,720,120,120,120,120,120,120)
(0.29011392944349235,Victini,Psychic,Fire,600,100,100,100,100,100,100)
(0.7343529726860826,Servine,Grass,,413,60,60,75,60,75,83)
(0.3928225740255662,Serperior,Grass,,528,75,75,95,75,95,113)
(0.43891545502075757,Emboar,Fire,Fighting,528,110,123,65,100,65,65)
(0.0112421850946831 1,Dewott,Water,,413,75,75,60,83,60,60)
(0.8939650504748,Samurott,Water,,528,95,100,85,108,70,70)
(0.17370616511919257,Watchog,Normal,,420,60,85,69,60,69,77)
(0.8125627116909591,Herdier,Normal,,370,65,80,65,35,65,60)
(0.6433219167176258,Stoutland,Normal,,500,85,110,90,45,90,80)
(0.021462947054669446,Simisage,Grass,,498,75,98,63,98,63,101)
(0.3973717202395939,Simisear,Fire,,498,75,98,63,98,63,101)
(0.2731694100488228,Simipour,Water,,498,75,98,63,98,63,101)
(0.6992924876356715,Musharna,Psychic,,487,116,55,85,107,95,29)
(0.12483456958871963,Tranquill,Normal,Flying,358,62,77,62,50,42,65)
(0.90303396978893 89,Unfezant,Normal,Flying,488,80,115,80,65,55,93)
(0.9492879635818443,Zebstrika,Electric,,497,75,100,63,80,63,116)
(0.4742334747212008,Roggenrola,Rock,,280,55,75,85,25,25,15)
(0.6059452155098545,Boldore,Rock,,390,70,105,105,50,40,20)
(0.18771627077974595,Gigalith,Rock,,515,85,135,130,60,80,25)
(0.36344119418187537,Excadrill,Ground,Steel,508,110,135,60,50,65,88)
(0.2626230967546749,Audino,Normal,,445,103,60,86,60,86,50)
(0.4418951723897516,AudinoMega Audino,Normal,Fairy,545,103,60,126,80,126,50)
(0.41 18930608341117,Gurdurr,Fighting,,405,85,105,85,40,50,40)
(0.6567352457026913,Conkeldurr,Fighting,,505,105,140,95,55,65,45)
(0.6394328802376278,Seismitoad,Water,Ground,509,105,95,75,85,75,74)
(0.4895778568509003,Throh,Fighting,,465,120,100,85,30,85,45)
(0.7342424373130101,Sawk,Fighting,,465,75,125,75,30,75,85)
(0.8920106117166052,Sewaddle,Bug,Grass,310,45,53,70,40,60,42)
(0.04483492338782835,Swadloon,Bug,Grass,380,55,63,90,50,80,42)
(0.9181073903713484,Leavanny,Bug,Grass,500,75,103,80,70,80,92)
(0.41889875603689775,Venipede,Bug,Poison,260,30,45,59,30,39,57)
(0.06959453303083663,Whirlipede,Bug,Poison,360,40,55,99,40,79,47)
(0.45233751479825124,Scolipede,Bug,Poison,485,60,100,89,55,69,112)
(0.9778867391150359,Cottonee,Grass,Fairy,280,40,27,60,37,50,66)
(0.0892593100084 2358,Whimsicott,Grass,Fairy,480,60,67,85,77,75,116)
(0.7094457371221805,Lilligant,Grass,,480,70,60,75,110,75,90)
(0.471453981926441 17,Basculin,Water,,460,70,92,65,80,55,98)
(0.8004384130759568,Krookodile,Ground,Dark,519,95,117,80,65,70,92)
(0.964312940571593,DarmanitanZen Mode,Fire,Psychic,540,105,30,105,140,105,55)
(0.8544575879703104,Maractus,Grass,,461,75,86,67,106,67,60)
(0.8385483818892043,Dwebble,Bug,Rock,325,50,65,85,35,35,55)
(0.6897216259387648,Crustle,Bug,Rock,475,70,95,125,65,75,45)
(0.9066226860043051,Scraggy,Dark,Fighting,348,50,75,70,35,70,48)
(0.13191373404772522,Scrafty,Dark,Fighting,488,65,90,115,45,115,58)
(0.8832910162482789,Sigilyph,Psychic,Flying,490,72,58,80,103,80,97)
(0.41351156903893005,Yamask,Ghost,,303,38,30,85,55,65,30)
(0.63550888331 13992,Cofagrigus,Ghost,,483,58,50,145,95,105,30)
(0.07356566672016507,Tirtouga,Water,Rock,355,54,78,103,53,45,22)
(0.22319556049282396,Carracosta,Water,Rock,495,74,108,133,83,65,32)
(0.3325177675300862,Archeops,Rock,Flying,567,75,140,65,112,65,110)
(0.5146424350796385,Trubbish,Poison,,329,50,50,62,40,62,65)
(0.23952922291426126,Garbodor,Poison,,474,80,95,82,60,82,75)
(0.6349990100448025,Zoroark,Dark,,510,60,105,60,120,60,105)
(0.8152696921603539,Cinccino,Normal,,470,75,95,60,65,60,115)
(0.910172961586882,Gothorita,Psychic,,390,60,45,70,75,85,55)
(0.8171727377883207,Gothitelle,Psychic,,490,70,55,95,95,110,65)
(0.7791842869267771,Reuniclus,Psychic,,490,110,65,75,125,85,30)
(0.27840031153346556,Swanna,Water,Flying,473,75,87,63,87,63,98)
(0.2336799410649837,Vanillish,Ice,,395,51,65,65,80,75,59)
(0.2733966429598924,Vanilluxe,Ice,,535,71,95,85,110,95,79)
(0.21273468505209947,Sawsbuck,Normal,Grass,475,80,100,70,60,70,95)
(0.3648090028441 1244,Emolga,Electric,Flying,428,55,75,60,75,60,103)
(0.4336492610994054,Escavalier,Bug,Steel,495,70,135,105,60,105,20)
(0.32718087644918736,Amoonguss,Grass,Poison,464,114,85,70,85,80,30)
(0.9152483888494701,Jellicent,Water,Ghost,480,100,60,70,85,105,60)
(0.22628686113792418,Alomomola,Water,,470,165,75,80,40,45,65)
(0.8798416844164206,Galvantula,Bug,Electric,472,70,77,60,97,60,108)

(0.979002551692819,Ferroseed,Grass,Steel,305,44,50,91,24,86,10)
(0.37483021372781666,Ferrothorn,Grass,Steel,489,74,94,131,54,116,20)
(0.6125397793409416,Klink,Steel,,300,40,55,70,45,60,30)
(0.2968336472669153,Klang,Steel,,440,60,80,95,70,85,50)
(0.5847037129070729,Klinklang,Steel,,520,60,100,115,70,85,90)
(0.13271689005476228,Eelektrik,Electric,,405,65,85,70,75,70,40)
(0.485145016521118225,Eelektross,Electric,,515,85,115,80,105,80,50)
(0.64617516921117776,Beheeyem,Psychic,,485,75,75,75,125,95,40)
(0.993614419379672,Lampent,Ghost,Fire,370,60,40,60,95,60,55)
(0.5693813766417004,Chandelure,Ghost,Fire,520,60,55,90,145,90,80)
(0.17282975573080228,Axew,Dragon,,320,46,87,60,30,40,57)
(0.6310232970571308,Fraxure,Dragon,,410,66,117,70,40,50,67)
(0.5842144266002846,Haxorus,Dragon,,540,76,147,90,60,70,97)
(0.6299003832646838,Beartic,Ice,,485,95,110,80,70,80,50)
(0.6635608304772527,Shelmet,Bug,,305,50,40,85,40,65,25)
(0.8027738038850312,Stunfisk,Ground,Electric,471,109,66,84,81,99,32)
(0.6253418242708517,Mienshao,Fighting,,510,65,125,60,95,60,105)
(0.13265874129934419,Druddigon,Dragon,,485,77,120,90,60,90,48)
(0.4892867529493171,Golurk,Ground,Ghost,483,89,124,80,55,80,55)
(0.08612820562912937,Pawniard,Dark,Steel,340,45,85,70,40,40,60)
(0.7669344996840589,Bisharp,Dark,Steel,490,65,125,100,60,70,70)
(0.2830032503135018,Bouffalant,Normal,,490,95,110,95,40,95,55)
(0.8007747088466185,Braviary,Normal,Flying,510,100,123,75,57,75,80)
(0.9071964397692284,Vullaby,Dark,Flying,370,70,55,75,45,65,60)
(0.6215167775537123,Mandibuzz,Dark,Flying,510,110,65,105,55,95,80)
(0.022247429565071974,Heatmor,Fire,,484,85,97,66,105,66,65)
(0.6528367251627636,Durant,Bug,Steel,484,58,109,112,48,48,109)
(0.00865057488199683l,Zweilous,Dark,Dragon,420,72,85,70,65,70,58)
(0.33611937194994057,Hydreigon,Dark,Dragon,600,92,105,90,125,90,98)
(0.8824679618533845,Volcarona,Bug,Fire,550,85,60,65,135,105,100)
(0.22434066424464738,Cobalion,Steel,Fighting,580,91,90,129,90,72,108)
(0.46660819911155635,Terrakion,Rock,Fighting,580,91,129,90,72,90,108)
(0.7740488229649581,Virizion,Grass,Fighting,580,91,90,72,90,129,108)
(0.08882251979013722,TornadusIncarnate Forme,Flying,,580,79,115,70,125,80,111)
(0.682753482027208,TornadusTherian Forme,Flying,,580,79,100,80,110,90,121)
(0.3858386056821105,ThundurusIncarnate Forme,Electric,Flying,580,79,115,70,125,80,111)
(0.4268972921761309,ThundurusTherian Forme,Electric,Flying,580,79,105,70,145,80,101)
(0.7536578414488121,Reshiram,Dragon,Fire,680,100,120,100,150,120,90)
(0.6695655058614396,Zekrom,Dragon,Electric,680,100,150,120,120,100,90)
(0.243048855452501l,LandorusIncarnate Forme,Ground,Flying,600,89,125,90,115,80,101)
(0.45941184121876855,LandorusTherian Forme,Ground,Flying,600,89,145,90,105,80,91)
(0.14046576257087628,Kyurem,Dragon,Ice,660,125,130,90,130,90,95)
(0.9307962914880142,KyuremBlack Kyurem,Dragon,Ice,700,125,170,100,120,90,95)
(0.8724208616380448,KyuremWhite Kyurem,Dragon,Ice,700,125,120,90,170,100,95)
(0.3533177987390703,KeldeoOrdinary Forme,Water,Fighting,580,91,72,90,129,90,108)
(0.14078435482663032,KeldeoResolute Forme,Water,Fighting,580,91,72,90,129,90,108)
(0.4458839557851517,MeloettaAria Forme,Normal,Psychic,600,100,77,77,128,128,90)
(0.6432347199497458,MeloettaPirouette Forme,Normal,Fighting,600,100,128,90,77,77,128)
(0.4609180179175011,Genesect,Bug,Steel,600,71,120,95,120,95,99)
(0.30342999314132024,Chespin,Grass,,313,56,61,65,48,45,38)
(0.5186116162047322,Quilladin,Grass,,405,61,78,95,56,58,57)
(0.46632746542435044,Chesnaught,Grass,Fighting,530,88,107,122,74,75,64)
(0.40526574450116426,Braixen,Fire,,409,59,59,58,90,70,73)
(0.982985391105282,Delphox,Fire,Psychic,534,75,69,72,114,100,104)
(0.6853260883574754,Greninja,Water,Dark,530,72,95,67,103,71,122)
(0.8843006617293988,Diggersby,Normal,Ground,423,85,56,77,50,77,78)
(0.6709361211683296,Talonflame,Fire,Flying,499,78,81,71,74,69,126)
(0.433257791042835,Spewpa,Bug,,213,45,22,60,27,30,29)
(0.9685553596209526,Litleo,Fire,Normal,369,62,50,58,73,54,72)
(0.6498042731714513,Pyroar,Fire,Normal,507,86,68,72,109,66,106)
(0.9178973807613051,Florges,Fairy,,552,78,65,68,112,154,75)
(0.961460574418371,Gogoat,Grass,,531,123,100,62,97,81,68)
(0.9582333586847973,Pancham,Fighting,,348,67,82,62,46,48,43)
(0.8768881040303927,Pangoro,Fighting,Dark,495,95,124,78,69,71,58)
(0.5207095103197618,Furfrou,Normal,,472,75,80,60,65,90,102)
(0.5801601516771044,MeowsticMale,Psychic,,466,74,48,76,83,81,104)
(0.4380916437961345,MeowsticFemale,Psychic,,466,74,48,76,83,81,104)
(0.06232648908858718,Honedge,Steel,Ghost,325,45,80,100,35,37,28)
(0.5862546909545795,Doublade,Steel,Ghost,448,59,110,150,45,49,35)
(0.9465699907997059,AegislashShield Forme,Steel,Ghost,520,60,50,150,50,150,60)
(0.791379356043397,Spritzee,Fairy,,341,78,52,60,63,65,23)
(0.016985691223769805,Aromatisse,Fairy,,462,101,72,72,99,89,29)
(0.23543070166642832,Swirlix,Fairy,,341,62,48,66,59,57,49)
(0.7625616831321228,Slurpuff,Fairy,,480,82,80,86,85,75,72)
(0.21792460677770176,Malamar,Dark,Psychic,482,86,92,88,68,75,73)
(0.0217177540783339868,Binacle,Rock,Water,306,42,52,67,39,56,50)
(0.247714138710526672,Barbaracle,Rock,Water,500,72,105,115,54,86,68)
(0.22380261461414097,Skrelp,Poison,Water,320,50,60,60,60,60,30)

(0.8736515408516295,Dragalge,Poison,Dragon,494,65,75,90,97,123,44)
(0.32792843133199334,Clauncher,Water,,330,50,53,62,58,63,44)
(0.26222844152731006,Clawitzer,Water,,500,71,73,88,120,89,59)
(0.5527188155938295,Tyrunt,Rock,Dragon,362,58,89,77,45,45,48)
(0.4040192937844793,Tyrantrum,Rock,Dragon,521,82,121,119,69,59,71)
(0.4598810289486357,Aurorus,Rock,Ice,521,123,77,72,99,92,58)
(0.6049261476162088,Sylveon,Fairy,,525,95,65,65,110,130,60)
(0.12752046922406968,Hawlucha,Fighting,Flying,500,78,92,75,74,63,118)
(0.9844504064212537,Dedenne,Electric,Fairy,431,67,58,57,81,67,101)
(0.6439619419946304,Carbink,Rock,Fairy,500,50,50,150,50,150,50)
(0.4687236729615394,Goodra,Dragon,,600,90,100,70,110,150,80)
(0.228316620311639,Klefki,Steel,Fairy,470,57,80,91,80,87,75)
(0.90366795861641,Trevenant,Ghost,Grass,474,85,110,76,65,82,56)
(0.08954773066385813,PumpkabooAverage Size,Ghost,Grass,335,49,66,70,44,55,51)
(0.6119015294475193,PumpkabooSmall Size,Ghost,Grass,335,44,66,70,44,55,56)
(0.9613850222427273,PumpkabooLarge Size,Ghost,Grass,335,54,66,70,44,55,46)
(0.9299620782916923,PumpkabooSuper Size,Ghost,Grass,335,59,66,70,44,55,41)
(0.7767778504027565,GourgeistAverage Size,Ghost,Grass,494,65,90,122,58,75,84)
(0.959810592396105,GourgeistSmall Size,Ghost,Grass,494,55,85,122,58,75,99)
(0.4939512842240431,GourgeistLarge Size,Ghost,Grass,494,75,95,122,58,75,69)
(0.18575815503543014,GourgeistSuper Size,Ghost,Grass,494,85,100,122,58,75,54)
(0.8684509132497414,Bergmite,Ice,,304,55,69,85,32,35,28)
(0.4959012899737031,Avalugg,Ice,,514,95,117,184,44,46,28)
(0.33437196182286766,Noivern,Flying,Dragon,535,85,70,80,97,80,123)
(0.022460725304161655,Xerneas,Fairy,,680,126,131,95,131,98,99)
(0.8564265504613259,Yveltal,Dark,Flying,680,126,131,95,131,98,99)
(0.6103189961650772,Zygarde50% Forme,Dragon,Ground,600,108,100,121,81,95,95)
(0.026403650948024993,Diancie,Rock,Fairy,600,50,100,150,100,150,50)
(0.4353984204423802,DiancieMega Diancie,Rock,Fairy,700,50,160,110,160,110,110)
(0.07732919766283852,HoopaHoopa Confined,Psychic,Ghost,600,80,110,60,150,130,70)
(0.6377856640200636,HoopaHoopa Unbound,Psychic,Dark,680,80,160,60,170,130,80)
(0.29128054885816546,Volcanion,Fire,Water,600,80,110,120,130,90,70)

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

Explanation: This will give us consequently a layer arranged to pick the random list which 1st player will choose.

Command

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

```
sahil@ubuntu:~/Desktop$ pig -x mapreduce
17/12/05 14:04:35 INFO pig.ExecTypeProvider: Trying ExecType : LOCAL
17/12/05 14:04:35 INFO pig.ExecTypeProvider: Trying ExecType : MAPREDUCE
17/12/05 14:04:35 INFO pig.ExecTypeProvider: Picked MAPREDUCE as the ExecType
2017-12-05 14:04:35,799 [main] INFO  org.apache.pig.Main - Apache Pig version 0.17.0 (r1797386) compiled Jun 02 2017, 15:41:58
2017-12-05 14:04:35,799 [main] INFO  org.apache.pig.Main - Logging error messages to: /home/sahil/Desktop/pig_1512511475797.log
2017-12-05 14:04:35,834 [main] INFO  org.apache.pig.impl.util.Utils - Default bootup file /home/sahil/.pigbootup not found
2017-12-05 14:04:36,561 [main] INFO  org.apache.hadoop.conf.Configuration.deprecation - mapred.job.tracker is deprecated. Instead, use mapreduce.
jobtracker.address
2017-12-05 14:04:36,561 [main] INFO  org.apache.pig.backend.hadoop.executionengine.HExecutionEngine - Connecting to hadoop file system at: hdfs:/
/localhost:9000
2017-12-05 14:04:37,206 [main] INFO  org.apache.pig.PigServer - Pig Script ID for the session: PIG-default-79d33d77-2ae7-4a1b-8bcd-c693168b03ec
2017-12-05 14:04:37,206 [main] WARN  org.apache.pig.PigServer - ATS is disabled since yarn.timeline-service.enabled set to false
grunt> Load_Data = LOAD '/u01/hadoop/Pig/Pokemon_usecase/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);
grunt> selected_list = FILTER Load_Data BY Defense>55;
grunt> random_include1 = foreach selected_list GENERATE RANDOM(),Name,Type1,Type2,Total,HP,Attack,Defense,SpAtk,SpDef,Speed;
grunt> random1_desending = ORDER random_include1 BY $0 DESC;
grunt> dump random1_desending;
```

Result:-

```
 🔴 🟡 🟢   sahil@ubuntu: ~/Desktop
2017-12-05 14:09:42,072 [main] INFO  org.apache.pig.backend.hadoop.executionengine.uti
(0.9945216681958671,Archeops,Rock,Flying,567,75,140,65,112,65,110)
(0.9936380882780834,Cherrim,Grass,,450,70,60,70,87,78,85)
(0.9914259153647166,Seismitoad,Water,Ground,509,105,95,75,85,75,74)
(0.9889845027744798,Manaphy,Water,,600,100,100,100,100,100,100)
(0.9889648909392438,Lapras,Water,Ice,535,130,85,80,85,95,60)
(0.988897685777256,Zoroark,Dark,,510,60,105,60,120,60,105)
(0.9820125790835535,Goodra,Dragon,,600,90,100,70,110,150,80)
(0.9808129906037314,Castform,Normal,,420,70,70,70,70,70,70)
(0.9806905821203366,Gogoat,Grass,,531,123,100,62,97,81,68)
(0.9803130181514224,Dewott,Water,,413,75,75,60,83,60,60)
(0.9762790099606663,Shieldon,Rock,Steel,350,30,42,118,42,88,30)
(0.9762271819788206,Ambipom,Normal,,482,75,100,66,60,66,115)
(0.9737913346364928,Qwilfish,Water,Poison,430,65,95,75,55,55,85)
(0.9718833685507167,Klang,Steel,,440,60,80,95,70,85,50)
(0.9715855876932161,CharizardMega Charizard X,Fire,Dragon,634,78,130,111,130,85,100)
(0.9713387677092752,Granbull,Fairy,,450,90,120,75,60,60,45)
(0.9698715764609106,Yveltal,Dark,Flying,680,126,131,95,131,98,99)
(0.9684056597877571,Roggenrola,Rock,,280,55,75,85,25,25,15)
(0.9662453579219441,Emboar,Fire,Fighting,528,110,123,65,100,65,65)
(0.9563477313492359,Durant,Bug,Steel,484,58,109,112,48,48,109)
(0.9554754232798406,Crustle,Bug,Rock,475,70,95,125,65,75,45)
(0.9538050526595776,Tauros,Normal,,490,75,100,95,40,70,110)
(0.953679861302936,HoopaHoopa Confined,Psychic,Ghost,600,80,110,60,150,130,70)
(0.9515429343068909,Machoke,Fighting,,405,80,100,70,50,60,45)
(0.9498903908545114,Carracosta,Water,Rock,495,74,108,133,83,65,32)
(0.9458183969948525,Solrock,Rock,Psychic,440,70,95,85,55,65,70)
(0.9391903654308003,GourgeistSuper Size,Ghost,Grass,494,85,100,122,58,75,54)
(0.9391267474475491,Venipede,Bug,Poison,260,30,45,59,30,39,57)
(0.9389396317161074,Scraggy,Dark,Fighting,348,50,75,70,35,70,48)
(0.9374321644758403,LandorusTherian Forme,Ground,Flying,600,89,145,90,105,80,91)
(0.9369967488234365,Palkia,Water,Dragon,680,90,120,100,150,120,100)
(0.9357509325660487,Nidoqueen,Poison,Ground,505,90,92,87,75,85,76)
(0.9310026462322274,Jellicent,Water,Ghost,480,100,60,70,85,105,60)
(0.929780744774255,Probopass,Rock,Steel,525,60,55,145,75,150,40)
(0.9269313568831964,Medicham,Fighting,Psychic,410,60,60,75,60,75,80)
(0.9262325035376066,Toxicroak,Poison,Fighting,490,83,106,65,86,65,85)
(0.9238302723139398,Carbink,Rock,Fairy,500,50,50,150,50,150,50)
(0.9208358350878131,Electrode,Electric,,480,60,50,70,80,80,140)
(0.9199524047711085,Gliscor,Ground,Flying,510,75,95,125,45,75,95)
```

(0.9945216681958671,Archeops,Rock,Flying,567,75,140,65,112,65,110)
(0.9936380882780834,Cherrim,Grass,,450,70,60,70,87,78,85)
(0.9914259153647166,Seismitoad,Water,Ground,509,105,95,75,85,75,74)
(0.9889845027744798,Manaphy,Water,,600,100,100,100,100,100,100)
(0.9889648909392438,Lapras,Water,Ice,535,130,85,80,85,95,60)
(0.988897685777256,Zoroark,Dark,,510,60,105,60,120,60,105)
(0.9820125790835535,Goodra,Dragon,,600,90,100,70,110,150,80)
(0.9808129906037314,Castform,Normal,,420,70,70,70,70,70,70)
(0.9806905821203366,Gogoat,Grass,,531,123,100,62,97,81,68)
(0.9803130181514224,Dewott,Water,,413,75,75,60,83,60,60)
(0.9762790099606663,Shieldon,Rock,Steel,350,30,42,118,42,88,30)
(0.9762271819788206,Ambipom,Normal,,482,75,100,66,60,66,115)
(0.9737913346364928,Qwilfish,Water,Poison,430,65,95,75,55,55,85)
(0.9718833685507167,Klang,Steel,,440,60,80,95,70,85,50)
(0.9715855876932161,CharizardMega Charizard X,Fire,Dragon,634,78,130,111,130,85,100)
(0.9713387677092752,Granbull,Fairy,,450,90,120,75,60,60,45)
(0.9698715764609106,Yveltal,Dark,Flying,680,126,131,95,131,98,99)
(0.9684056597877571,Roggenrola,Rock,,280,55,75,85,25,25,15)
(0.9662453579219441,Emboar,Fire,Fighting,528,110,123,65,100,65,65)
(0.9563477313492359,Durant,Bug,Steel,484,58,109,112,48,48,109)
(0.9554754232798406,Crustle,Bug,Rock,475,70,95,125,65,75,45)
(0.9538050526595776,Tauros,Normal,,490,75,100,95,40,70,110)
(0.953679861302936,HoopaHoopa Confined,Psychic,Ghost,600,80,110,60,150,130,70)
(0.9515429343068909,Machoke,Fighting,,405,80,100,70,50,60,45)
(0.9498903908545114,Carracosta,Water,Rock,495,74,108,133,83,65,32)

(0.9458183969948525,Solrock,Rock,Psychic,440,70,95,85,55,65,70)
(0.9391903654308003,GourgeistSuper Size,Ghost,Grass,494,85,100,122,58,75,54)
(0.9391267474475491,Venipede,Bug,Poison,260,30,45,59,30,39,57)
(0.9389396317161074,Scraggy,Dark,Fighting,348,50,75,70,35,70,48)
(0.9374321644758403,LandorusTherian Forme,Ground,Flying,600,89,145,90,105,80,91)
(0.9369967488234365,Palkia,Water,Dragon,680,90,120,100,150,120,100)
(0.9357509325660487,Nidoqueen,Poison,Ground,505,90,92,87,75,85,76)
(0.9310026462322274,Jellicent,Water,Ghost,480,100,60,70,85,105,60)
(0.929780744774255,Probopass,Rock,Steel,525,60,55,145,75,150,40)
(0.9269313568831964,Medicham,Fighting,Psychic,410,60,60,75,60,75,80)
(0.9262325035376066,Toxicroak,Poison,Fighting,490,83,106,65,86,65,85)
(0.9238302723139398,Carbink,Rock,Fairy,500,50,50,150,50,150,50)
(0.9208358350878131,Electrode,Electric,,480,60,50,70,80,80,140)
(0.9199524047711085,Gliscor,Ground,Flying,510,75,95,125,45,75,95)
(0.918250145237849,Gallade,Psychic,Fighting,518,68,125,65,65,115,80)
(0.9152503605657837,Golbat,Poison,Flying,455,75,80,70,65,75,90)
(0.9146421387496584,Infernape,Fire,Fighting,534,76,104,71,104,71,108)
(0.9138916837236072,RotomFrost Rotom,Electric,Ice,520,50,65,107,105,107,86)
(0.9126366336538357,LatiosMega Latios,Dragon,Psychic,700,80,130,100,160,120,110)
(0.9086540438181853,Weezing,Poison,,490,65,90,120,85,70,60)
(0.9081537060541762,Bergmite,Ice,,304,55,69,85,32,35,28)
(0.9060333986888028,MeowsticFemale,Psychic,,466,74,48,76,83,81,104)
(0.9056018535095602,Dodrio,Normal,Flying,460,60,110,70,60,60,100)
(0.9047360675754479,PidgeotMega Pidgeot,Normal,Flying,579,83,80,80,135,80,121)
(0.9047192236094311,Dragonair,Dragon,,420,61,84,65,70,70,70)
(0.9046795849145589,Heracross,Bug,Fighting,500,80,125,75,40,95,85)
(0.9017982652186036,Pangoro,Fighting,Dark,495,95,124,78,69,71,58)
(0.901721554274643,Mewtwo,Psychic,,680,106,110,90,154,90,130)
(0.8987459769951047,Togepi,Fairy,,245,35,20,65,40,65,20)
(0.8968668523440415,Shelgon,Dragon,,420,65,95,100,60,50,50)
(0.896710528524996,Servine,Grass,,413,60,60,75,60,75,83)
(0.8937726683327315,Virizion,Grass,Fighting,580,91,90,72,90,129,108)
(0.8928359884889423,Furret,Normal,,415,85,76,64,45,55,90)
(0.8914628582232806,Pachirisu,Electric,,405,60,45,70,45,90,95)
(0.8887500002289455,Persian,Normal,,440,65,70,60,65,65,115)
(0.8877646691800202,Quilava,Fire,,405,58,64,58,80,65,80)
(0.8872693000422839,Vileplume,Grass,Poison,490,75,80,85,110,90,50)
(0.8858921648111577,Yanmega,Bug,Flying,515,86,76,86,116,56,95)
(0.8835214707117595,Arbok,Poison,,438,60,85,69,65,79,80)
(0.8821402664658149,Terrakion,Rock,Fighting,580,91,129,90,72,90,108)
(0.8813054871337526,Magcargo,Fire,Rock,410,50,50,120,80,80,30)
(0.8790689557743997,Tirtouga,Water,Rock,355,54,78,103,53,45,22)
(0.8781413955272851,GiratinaAltered Forme,Ghost,Dragon,680,150,100,120,100,120,90)
(0.876923401290176,Rayquaza,Dragon,Flying,680,105,150,90,150,90,95)
(0.8746543069764972,Leafeon,Grass,,525,65,110,130,60,65,95)
(0.8735372491011969,Pinsir,Bug,,500,65,125,100,55,70,85)
(0.8733283081937223,AudinoMega Audino,Normal,Fairy,545,103,60,126,80,126,50)
(0.8721736202411092,Swampert,Water,Ground,535,100,110,90,85,90,60)
(0.8711257604403951,Uxie,Psychic,,580,75,75,130,75,130,95)
(0.8702071772995109,Miltank,Normal,,490,95,80,105,40,70,100)
(0.869091006383694,Exeggutor,Grass,Psychic,520,95,95,85,125,65,55)
(0.867790526629523,Klink,Steel,,300,40,55,70,45,60,30)
(0.8667025124829006,Cobalion,Steel,Fighting,580,91,90,129,90,72,108)
(0.8647777319923801,Zekrom,Dragon,Electric,680,100,150,120,120,100,90)
(0.8631736332689737,MeowsticMale,Psychic,,466,74,48,76,83,81,104)
(0.8624411613613031,Lilligant,Grass,,480,70,60,75,110,75,90)
(0.8606583458055874,Volcarona,Bug,Fire,550,85,60,65,135,105,100)
(0.8602135038444866,Roserade,Grass,Poison,515,60,70,65,125,105,90)
(0.8592008694874298,GarchompMega Garchomp,Dragon,Ground,700,108,170,115,120,95,92)
(0.8587996100005195,Lumineon,Water,,460,69,69,76,69,86,91)
(0.8582199214746571,Aerodactyl,Rock,Flying,515,80,105,65,60,75,130)
(0.85484643458248,Jolteon,Electric,,525,65,65,60,110,95,130)
(0.854160622468502,Zweilous,Dark,Dragon,420,72,85,70,65,70,58)
(0.8539584208130502,Shellder,Water,,305,30,65,100,45,25,40)
(0.8527888248667693,Bouffalant,Normal,,490,95,110,95,40,95,55)
(0.8524833888818629,Garchomp,Dragon,Ground,600,108,130,95,80,85,102)
(0.8520311058561718,Magmar,Fire,,495,65,95,57,100,85,93)
(0.8494092717815327,Dunsparce,Normal,,415,100,70,70,65,65,45)
(0.8477608783743237,Aurorus,Rock,Ice,521,123,77,72,99,92,58)
(0.8439033904238555,Azumarill,Water,Fairy,420,100,50,80,60,80,50)
(0.8417706240548392,Duskull,Ghost,,295,20,40,90,30,90,25)
(0.8415143766057628,SalamenceMega Salamence,Dragon,Flying,700,95,145,130,120,90,120)
(0.8414804399899874,CameruptMega Camerupt,Fire,Ground,560,70,120,100,145,105,20)
(0.8406999683019778,Unfezant,Normal,Flying,488,80,115,80,65,55,93)
(0.8371140731266239,Seadra,Water,,440,55,65,95,95,45,85)
(0.8329498557887878,Hippopotas,Ground,,330,68,72,78,38,42,32)
(0.8327749196919323,Ninetales,Fire,,505,73,76,75,81,100,100)
(0.8309547078157555,Kecleon,Normal,,440,60,90,70,60,120,40)

(0.827961048670421 l,Pyroar,Fire,Normal,507,86,68,72,109,66,106)
(0.8182564628587751,AmpharosMega Ampharos,Electric,Dragon,610,90,95,105,165,110,45)
(0.8176506184548138,LopunnyMega Lopunny,Normal,Fighting,580,65,136,94,54,96,135)
(0.8176142560406356,Quagsire,Water,Ground,430,95,85,85,65,65,35)
(0.8148266915838145,Reshiram,Dragon,Fire,680,100,120,100,150,120,90)
(0.8139225693898774,ThundurusIncarnate Forme,Electric,Flying,580,79,115,70,125,80,111)
(0.8108303611950783,GlalieMega Glalie,Ice,,580,80,120,80,120,80,100)
(0.8089006654705914,Eelektrik,Electric,,405,65,85,70,75,70,40)
(0.8078854189752049,MetagrossMega Metagross,Steel,Psychic,700,80,145,150,105,110,110)
(0.8057733310205103,SwampertMega Swampert,Water,Ground,635,100,150,110,95,110,70)
(0.8036887878710178,Ludicolo,Water,Grass,480,80,70,70,90,100,70)
(0.8024483129580883,ThundurusTherian Forme,Electric,Flying,580,79,105,70,145,80,101)
(0.8018121861607647,Zygarde50% Forme,Dragon,Ground,600,108,100,121,81,95,95)
(0.7994207402675761,Galvantula,Bug,Electric,472,70,77,60,97,60,108)
(0.7984885061467069,MeloettaAria Forme,Normal,Psychic,600,100,77,77,128,128,90)
(0.796478362664 88,Lopunny,Normal,,480,65,76,84,54,96,105)
(0.7952629424166959,Nosepass,Rock,,375,30,45,135,45,90,30)
(0.795133877902157,Braviary,Normal,Flying,510,100,123,75,57,75,80)
(0.7943216888552239,KyogrePrimal Kyogre,Water,,770,100,150,90,180,160,90)
(0.7927293084747159,Greninja,Water,Dark,530,72,95,67,103,71,122)
(0.7851792344666075,DeoxysDefense Forme,Psychic,,600,50,70,160,70,160,90)
(0.7836380930703073,Fearow,Normal,Flying,442,65,90,65,61,61,100)
(0.782483536716838,Graveler,Rock,Ground,390,55,95,115,45,45,35)
(0.7785121445113447,Heatmor,Fire,,484,85,97,66,105,66,65)
(0.7770087169983362,Dewgong,Water,Ice,475,90,70,80,70,95,70)
(0.7736737394388323,Linoone,Normal,,420,78,70,61,50,61,100)
(0.7728588795329172,Poliwrath,Water,Fighting,510,90,95,95,70,90,70)
(0.7702311972375657,Sawk,Fighting,,465,75,125,75,30,75,85)
(0.7665400753243184,Lileep,Rock,Grass,355,66,41,77,61,87,23)
(0.7619409953527908,Samurott,Water,,528,95,100,85,108,70,70)
(0.7570498872822948,Beartic,Ice,,485,95,110,80,70,80,50)
(0.7540642049833519,Raticate,Normal,,413,55,81,60,50,70,97)
(0.7509466881224838,Regirock,Rock,,580,80,100,200,50,100,50)
(0.7503076473093085,TyranitarMega Tyranitar,Rock,Dark,700,100,164,150,95,120,71)
(0.7497526584611727,Rotom,Electric,Ghost,440,50,50,77,95,77,91)
(0.7476649774548871,Zebstrika,Electric,,497,75,100,63,80,63,116)
(0.7445605953467465,Conkeldurr,Fighting,,505,105,140,95,55,65,45)
(0.7443766924130004,Spinda,Normal,,360,60,60,60,60,60,60)
(0.7435841951378287,Gastrodon,Water,Ground,475,111,83,68,92,82,39)
(0.7434955038510709,Slowking,Water,Psychic,490,95,75,80,100,110,30)
(0.7422908629553382,Stantler,Normal,,465,73,95,62,85,65,85)
(0.7393716412700322,Carnivine,Grass,,454,74,100,72,90,72,46)
(0.7295739613279528,Scrafty,Dark,Fighting,488,65,90,115,45,115,58)
(0.7289091998709623,Gothorita,Psychic,,390,60,45,70,75,85,55)
(0.7286336481839412,Poliwhirl,Water,,385,65,65,65,50,50,90)
(0.7278016324702108,Porygon2,Normal,,515,85,80,90,105,95,60)
(0.7271709002032797,Slowpoke,Water,Psychic,315,90,65,65,40,40,15)
(0.725133374056063,Cinccino,Normal,,470,75,95,60,65,60,115)
(0.7249682963821965,Basculin,Water,,460,70,92,65,80,55,98)
(0.7245492659956809,Nidorino,Poison,,365,61,72,57,55,55,65)
(0.7243672286107515,Jumpluff,Grass,Flying,460,75,55,70,55,95,110)
(0.7219679178626104,Lampent,Ghost,Fire,370,60,40,60,95,60,55)
(0.7215612758734504,Goldeen,Water,,320,45,67,60,35,50,63)
(0.720973321980364,Mesprit,Psychic,,580,80,105,105,105,105,80)
(0.7196440261990563,Mew,Psychic,,600,100,100,100,100,100,100)
(0.7175794905190517,Swanna,Water,Flying,473,75,87,63,87,63,98)
(0.716957259088351,Latios,Dragon,Psychic,600,80,90,80,130,110,110)
(0.7123682475150096,Chespin,Grass,,313,56,61,65,48,45,38)
(0.7115054875278889,Klefki,Steel,Fairy,470,57,80,91,80,87,75)
(0.7089703172506587,Walrein,Ice,Water,530,110,80,90,95,90,65)
(0.7087379964383458,Excadrill,Ground,Steel,508,110,135,60,50,65,88)
(0.7078739316773996,Purugly,Normal,,452,71,82,64,64,59,112)
(0.6981496447751717,Bayleef,Grass,,405,60,62,80,63,80,60)
(0.6941793056984542,Tyrantrum,Rock,Dragon,521,82,121,119,69,59,71)
(0.6931918578553131,Metagross,Steel,Psychic,600,80,135,130,95,90,70)
(0.69305222640443,Shuckle,Bug,Rock,505,20,10,230,10,230,5)
(0.6926833769228586,RotomWash Rotom,Electric,Water,520,50,65,107,105,107,86)
(0.69025912186324,Sigilyph,Psychic,Flying,490,72,58,80,103,80,97)
(0.6899559106477547,Azelf,Psychic,,580,75,125,70,125,70,115)
(0.6849432842262838,Scyther,Bug,Flying,500,70,110,80,55,80,105)
(0.6814392215172516,Metang,Steel,Psychic,420,60,75,100,55,80,50)
(0.6799731040081842,Jirachi,Steel,Psychic,600,100,100,100,100,100,100)
(0.6799224252602705,Entei,Fire,,580,115,115,85,90,75,100)
(0.6792599318730053,Pancham,Fighting,,348,67,82,62,46,48,43)
(0.6778533891659412,Muk,Poison,,500,105,105,75,65,100,50)
(0.6762385764189341,CharizardMega Charizard Y,Fire,Flying,634,78,104,78,159,115,100)
(0.6746347924844122,Manectric,Electric,,475,70,75,60,105,60,105)
(0.672792757555809,RayquazaMega Rayquaza,Dragon,Flying,780,105,180,100,180,100,115)

(0.6674636128965907,Parasect,Bug,Grass,405,60,95,80,60,80,30)
(0.6662188578412134,Snorlax,Normal,,540,160,110,65,65,110,30)
(0.663669627453891,Grotle,Grass,,405,75,89,85,55,65,36)
(0.6606843522946999,Turtwig,Grass,,318,55,68,64,45,55,31)
(0.6589426473576774,Quilladin,Grass,,405,61,78,95,56,58,57)
(0.6581901445297178,GalladeMega Gallade,Psychic,Fighting,618,68,165,95,65,115,110)
(0.6579290841835703,Clauncher,Water,,330,50,53,62,58,63,44)
(0.6574504723419998,Magnemite,Electric,Steel,325,25,35,70,95,55,45)
(0.6550580501485335,Regice,Ice,,580,80,50,100,100,200,50)
(0.654021381465232,Wartortle,Water,,405,59,63,80,65,80,58)
(0.6534330277620343,Tangela,Grass,,435,65,55,115,100,40,60)
(0.6531766576811888,Watchog,Normal,,420,60,85,69,60,69,77)
(0.6531488101291234,Doublade,Steel,Ghost,448,59,110,150,45,49,35)
(0.6522834454200307,Marshtomp,Water,Ground,405,70,85,70,60,70,50)
(0.6495304321858182,Garbodor,Poison,,474,80,95,82,60,82,75)
(0.6489884401119171,Mantine,Water,Flying,465,65,40,70,80,140,70)
(0.6457496960766801,Hitmontop,Fighting,,455,50,95,95,35,110,70)
(0.6456567814934039,GiratinaOrigin Forme,Ghost,Dragon,680,150,120,100,120,100,90)
(0.6443444887577767,LandorusIncarnate Forme,Ground,Flying,600,89,125,90,115,80,101)
(0.644090675052145,Cottonee,Grass,Fairy,280,40,27,60,37,50,66)
(0.6410158539657381,Golem,Rock,Ground,495,80,120,130,55,65,45)
(0.6410122734841488,Heatran,Fire,Steel,600,91,90,106,130,106,77)
(0.637396292758491 1,Latias,Dragon,Psychic,600,80,80,90,110,130,110)
(0.6356120609678227,AbomasnowMega Abomasnow,Grass,Ice,594,90,132,105,132,105,30)
(0.6329129990108731,Nidorina,Poison,,365,70,62,67,55,55,56)
(0.6304476450865247,Tangrowth,Grass,,535,100,100,125,110,50,50)
(0.6258569380462479,BanetteMega Banette,Ghost,,555,64,165,75,93,83,75)
(0.6257450529464719,Empoleon,Water,Steel,530,84,86,88,111,101,60)
(0.6255981641462849,Politoed,Water,,500,90,75,75,90,100,70)
(0.6253227997631673,Vanillish,Ice,,395,51,65,65,80,75,59)
(0.6249377100609483,Krookodile,Ground,Dark,519,95,117,80,65,70,92)
(0.6226229398266098,Aromatisse,Fairy,,462,101,72,72,99,89,29)
(0.620132710142287,Omanyte,Rock,Water,355,35,40,100,90,55,35)
(0.619027251567291 1,Vaporeon,Water,,525,130,65,60,110,95,65)
(0.6189707515396521,Hydreigon,Dark,Dragon,600,92,105,90,125,90,98)
(0.6186935128339024,Horsea,Water,,295,30,40,70,70,25,60)
(0.615470249593441,Octillery,Water,,480,75,105,75,105,75,45)
(0.6111569592498808,Hariyama,Fighting,,474,144,120,60,40,60,50)
(0.6094069048985482,Skorupi,Poison,Bug,330,40,50,90,30,55,65)
(0.6091253170289327,Kyurem,Dragon,Ice,660,125,130,90,130,90,95)
(0.6074791562845562,GardevoirMega Gardevoir,Psychic,Fairy,618,68,85,65,165,135,100)
(0.6045361364401541,Celebi,Psychic,Grass,600,100,100,100,100,100,100)
(0.599688707453345,Golduck,Water,,500,80,82,78,95,80,85)
(0.5990263281457866,Mienshao,Fighting,,510,65,125,60,95,60,105)
(0.5988989255212982,Kangaskhan,Normal,,490,105,95,80,40,80,90)
(0.5988789323310244,Kingler,Water,,475,55,130,115,50,50,75)
(0.5988712415420344,Chimecho,Psychic,,425,65,50,70,95,80,65)
(0.5959143464117508,Suicune,Water,,580,100,75,115,90,115,85)
(0.5947827910694844,Cloyster,Water,Ice,525,50,95,180,85,45,70)
(0.594620611066,ManectricMega Manectric,Electric,,575,70,75,80,135,80,135)
(0.5925792523838159,Xatu,Psychic,Flying,470,65,75,70,95,70,95)
(0.5917577585671839,Kabutops,Rock,Water,495,60,115,105,65,70,80)
(0.591414183184467,Sudowoodo,Rock,,410,70,100,115,30,65,30)
(0.5907722368364058,Regigigas,Normal,,670,110,160,110,80,110,100)
(0.5874285096964793,Porygon,Normal,,395,65,60,70,85,75,40)
(0.5867809710275163,Totodile,Water,,314,50,65,64,44,48,43)
(0.5863342159305233,Rapidash,Fire,,500,65,100,70,80,80,105)
(0.585175657176334,Xerneas,Fairy,,680,126,131,95,131,98,99)
(0.5828443082005832,GyaradosMega Gyarados,Water,Dark,640,95,155,109,70,130,81)
(0.5797997957245365,Yamask,Ghost,,303,38,30,85,55,65,30)
(0.5791392983205473,Chikorita,Grass,,318,45,49,65,49,65,45)
(0.5787891414618239,Sawsbuck,Normal,Grass,475,80,100,70,60,70,95)
(0.5748830976603855,MewtwoMega Mewtwo Y,Psychic,,780,106,150,70,194,120,140)
(0.5743804040469396,Altaria,Dragon,Flying,490,75,70,90,70,105,80)
(0.5730470361887545,Musharna,Psychic,,487,116,55,85,107,95,29)
(0.5707152538076613,Mightyena,Dark,,420,70,90,70,60,60,70)
(0.5703767086764127,Klinklang,Steel,,520,60,100,115,70,85,90)
(0.5684145230938962,Noivern,Flying,Dragon,535,85,70,80,97,80,123)
(0.5675260417750406,Bonsly,Rock,,290,50,80,95,10,45,10)
(0.5671457122810495,Slakoth,Normal,,280,60,60,60,35,35,30)
(0.5663627980035413,Mamoswine,Ice,Ground,530,110,130,80,70,60,80)
(0.5660209806172086,Staraptor,Normal,Flying,485,85,120,70,50,60,100)
(0.5644773308547985,WormadamSandy Cloak,Bug,Ground,424,60,79,105,59,85,36)
(0.5618571587923131,Gigalith,Rock,,515,85,135,130,60,80,25)
(0.5611489874751435,Exeggcute,Grass,Psychic,325,60,40,80,60,45,40)
(0.5563754999599094,Mandibuzz,Dark,Flying,510,110,65,105,55,95,80)
(0.5547123086123565,Cacturne,Grass,Dark,475,70,115,60,115,60,55)
(0.5540230553624751,Aggron,Steel,Rock,530,70,110,180,60,60,50)

(0.5520551314152794,Rhyhorn,Ground,Rock,345,80,85,95,30,30,25)
(0.5480599086412907,Dialga,Steel,Dragon,680,100,120,120,150,100,90)
(0.5457013231859305,Whiscash,Water,Ground,468,110,78,73,76,71,60)
(0.5456062157723306,Flygon,Ground,Dragon,520,80,100,80,80,80,100)
(0.5418473426040893,GourgeistAverage Size,Ghost,Grass,494,65,90,122,58,75,84)
(0.540125049758222,Salamence,Dragon,Flying,600,95,135,80,110,80,100)
(0.5392035287426513,Kyogre,Water,,670,100,100,90,150,140,90)
(0.5376986339098768,Slurpuff,Fairy,,480,82,80,86,85,75,72)
(0.5371907119108894,Camerupt,Fire,Ground,460,70,100,70,105,75,40)
(0.5324232027867171,Skuntank,Poison,Dark,479,103,93,67,71,61,84)
(0.5288928704016991,TornadusIncarnate Forme,Flying,,580,79,115,70,125,80,111)
(0.5259112447605803,Zapdos,Electric,Flying,580,90,90,85,125,90,100)
(0.5258647702456364,Rhydon,Ground,Rock,485,105,130,120,45,45,40)
(0.5238909495504288,Huntail,Water,,485,55,104,105,94,75,52)
(0.523100856211619,RotomHeat Rotom,Electric,Fire,520,50,65,107,105,107,86)
(0.5159311156409271,AggronMega Aggron,Steel,,630,70,140,230,60,80,50)
(0.5063344869575003,Blaziken,Fire,Fighting,530,80,120,70,110,70,80)
(0.5059994279881406,Whirlipede,Bug,Poison,360,40,55,99,40,79,47)
(0.505269393444381,Bellossom,Grass,,490,75,80,95,90,100,50)
(0.504958671808628,Braixen,Fire,,409,59,59,58,90,70,73)
(0.5046847916147819,Simisear,Fire,,498,75,98,63,98,63,101)
(0.5046633687083157,Mismagius,Ghost,,495,60,60,60,105,105,105)
(0.5020107777962987,GengarMega Gengar,Ghost,Poison,600,60,65,80,170,95,130)
(0.5013368215820077,Crobat,Poison,Flying,535,85,90,80,70,80,130)
(0.5009979054799739,SteelixMega Steelix,Steel,Ground,610,75,125,230,55,95,30)
(0.4972895810148885,Kingdra,Water,Dragon,540,75,95,95,95,95,85)
(0.4952927066586097,ShayminSky Forme,Grass,Flying,600,100,103,75,120,75,127)
(0.4945441224132486,HoundoomMega Houndoom,Dark,Fire,600,75,90,90,140,90,115)
(0.4941498444935944,Magmortar,Fire,,540,75,95,67,125,95,83)
(0.4915021703171804,AerodactylMega Aerodactyl,Rock,Flying,615,80,135,85,70,95,150)
(0.4869475228004269,Trubbish,Poison,,329,50,50,62,40,62,65)
(0.4857787189310983,Arcanine,Fire,,555,90,110,80,100,80,95)
(0.4851224094242349,Volcanion,Fire,Water,600,80,110,120,130,90,70)
(0.4837748594466292,RotomMow Rotom,Electric,Grass,520,50,65,107,105,107,86)
(0.4837748140871204,Pawniard,Dark,Steel,340,45,85,70,40,40,60)
(0.4834862553409181,Abomasnow,Grass,Ice,494,90,92,75,92,85,60)
(0.4826359538282183,Audino,Normal,,445,103,60,86,60,86,50)
(0.4805897260109028,Donphan,Ground,,500,90,120,120,60,60,50)
(0.4799642246625948,Trevenant,Ghost,Grass,474,85,110,76,65,82,56)
(0.4786355674496378,Swirlix,Fairy,,341,62,48,66,59,57,49)
(0.4779713381350911,Mr. Mime,Psychic,Fairy,460,40,45,65,100,120,90)
(0.4769227012624472,Ferroseed,Grass,Steel,305,44,50,91,24,86,10)
(0.4750231704692005,Florges,Fairy,,552,78,65,68,112,154,75)
(0.4747675706251978,Sealeo,Ice,Water,410,90,60,70,75,70,45)
(0.4737410934286988,Swellow,Normal,Flying,430,60,85,60,50,50,125)
(0.4730895267411446,SceptileMega Sceptile,Grass,Dragon,630,70,110,75,145,85,145)
(0.4707812520190789,Binacle,Rock,Water,306,42,52,67,39,56,50)
(0.4693763635154558,GroudonPrimal Groudon,Ground,Fire,770,100,180,160,150,90,90)
(0.4656287529605488,AegislashShield Forme,Steel,Ghost,520,60,50,150,50,150,60)
(0.4640104159898496,SableyeMega Sableye,Dark,Ghost,480,50,85,125,85,115,20)
(0.4625941886662995,Pupitar,Rock,Ground,410,70,84,70,65,70,51)
(0.4596373137053271,Emolga,Electric,Flying,428,55,75,60,75,60,103)
(0.4573247860085782,Ho-oh,Fire,Flying,680,106,130,90,110,154,90)
(0.4544759198290401,Exploud,Normal,,490,104,91,63,91,73,68)
(0.4534390278167134,Clefable,Fairy,,483,95,70,73,95,90,60)
(0.4518808354198228,Reuniclus,Psychic,,490,110,65,75,125,85,30)
(0.4463415556884413,Glaceon,Ice,,525,65,60,110,130,95,65)
(0.4426268622472722,Dusclops,Ghost,,455,40,70,130,60,130,25)
(0.4408065741309639,Nincada,Bug,Ground,266,31,45,90,30,30,40)
(0.43837719443031,Serperior,Grass,,528,75,75,95,75,95,113)
(0.4350270162609846,Corsola,Water,Rock,380,55,55,85,65,85,35)
(0.4340835805478484,Shroomish,Grass,,295,60,40,60,40,60,35)
(0.4320271343327311,Shelmet,Bug,,305,50,40,85,40,65,25)
(0.4274806653601619,Amoonguss,Grass,Poison,464,114,85,70,85,80,30)
(0.4269488409766671,LucarioMega Lucario,Fighting,Steel,625,70,145,88,140,70,112)
(0.4259792676691148,Victini,Psychic,Fire,600,100,100,100,100,100,100)
(0.4252865139301598,BlastoiseMega Blastoise,Water,,630,79,103,120,135,115,78)
(0.4250331143428204,Alomomola,Water,,470,165,75,80,40,45,65)
(0.4246512923771761,Gurdurr,Fighting,,405,85,105,85,40,50,40)
(0.4240348856092840,Darkrai,Dark,,600,70,90,90,135,90,125)
(0.4200952779728044,Crawdaunt,Water,Dark,468,63,120,85,90,55,55)
(0.4200334475036262,Claydol,Ground,Psychic,500,60,70,105,70,120,75)
(0.41879578480768,Sylveon,Fairy,,525,95,65,65,110,130,60)
(0.4180360403576452,AbsolMega Absol,Dark,,565,65,150,60,115,60,115)
(0.4145630706256168,Clawitzer,Water,,500,71,73,88,120,89,59)
(0.4138350312275222,Spewpa,Bug,,213,45,22,60,27,30,29)
(0.4088389180327192,WormadamTrash Cloak,Bug,Steel,424,60,69,95,69,95,36)
(0.4079337866145892,Slaking,Normal,,670,150,160,100,95,65,100)

(0.40677872487469036,Sceptile,Grass,,530,70,85,65,105,85,120)
(0.4022392696861211,Lanturn,Water,Electric,460,125,58,58,76,76,67)
(0.39416219758964965,Phanpy,Ground,,330,90,60,60,40,40,40)
(0.3935863268896071 5,Vespiquen,Bug,Flying,474,70,80,102,80,102,40)
(0.39238782770347325,Bagon,Dragon,,300,45,75,60,40,30,50)
(0.391465988214986,Ferrothorn,Grass,Steel,489,74,94,131,54,116,20)
(0.3864411459626552,Zangoose,Normal,,458,73,115,60,60,60,90)
(0.38404862391201 12,Onix,Rock,Ground,385,35,45,160,30,45,70)
(0.3827288090157335,KyuremBlack Kyurem,Dragon,Ice,700,125,170,100,120,90,95)
(0.38102363951 73291,Arceus,Normal,,720,120,120,120,120,120,120)
(0.37463434046207866,Bastiodon,Rock,Steel,495,60,52,168,47,138,30)
(0.37443797967110341,Lucario,Fighting,Steel,525,70,110,70,115,70,90)
(0.37421554973058324,Ampharos,Electric,,510,90,75,85,115,90,55)
(0.3733322725022161,MewtwoMega Mewtwo X,Psychic,Fighting,780,106,190,100,154,100,130)
(0.3716353451725759,Electabuzz,Electric,,490,65,83,57,95,85,105)
(0.3711704446233652 4,Squirtle,Water,,314,44,48,65,50,64,43)
(0.37069881990409836,Torkoal,Fire,,470,70,85,140,85,70,20)
(0.3676551784979102,Leavanny,Bug,Grass,500,75,103,80,70,80,92)
(0.36625154750922 25,Dustox,Bug,Poison,385,60,50,70,50,90,65)
(0.36437459002281847,Shiftry,Grass,Dark,480,90,100,60,90,60,80)
(0.3617653127310616,Gorebyss,Water,,485,55,84,105,114,75,52)
(0.361759846446741,Glalie,Ice,,480,80,80,80,80,80,80)
(0.3604083763253152,Bisharp,Dark,Steel,490,65,125,100,60,70,70)
(0.3602485234125692,Umbreon,Dark,,525,95,65,110,60,130,65)
(0.3593779949730007,DeoxysSpeed Forme,Psychic,,600,50,95,90,95,90,180)
(0.3568157530431 6115,Luxray,Electric,,523,80,120,79,95,79,70)
(0.3565536170503355,Nidoking,Poison,Ground,505,81,102,77,85,75,85)
(0.3537886983671361,Starmie,Water,Psychic,520,60,75,85,100,85,115)
(0.35245124822228424,Ariados,Bug,Poison,390,70,90,70,60,60,40)
(0.35202596832520905,Marowak,Ground,,425,60,80,110,50,80,45)
(0.34789610686012395,Simisage,Grass,,498,75,98,63,98,63,101)
(0.3462742420434688,Spiritomb,Ghost,Dark,485,50,92,108,92,108,35)
(0.3446399506340757,Pidgeot,Normal,Flying,479,83,80,75,70,70,101)
(0.34319583148500055,SlowbroMega Slowbro,Water,Psychic,590,95,75,180,130,80,30)
(0.3415388965894618,Drapion,Poison,Dark,500,70,90,110,60,75,95)
(0.3399285339274639,Lickilicky,Normal,,515,110,85,95,80,95,50)
(0.3379302491154994,Electivire,Electric,,540,75,123,67,95,85,95)
(0.332206455551 3271,Prinplup,Water,,405,64,66,68,81,76,50)
(0.329662516910 10584,Pineco,Bug,,290,50,65,90,35,35,15)
(0.3283822950422973,KeldeoResolute Forme,Water,Fighting,580,91,72,90,129,90,108)
(0.32824016674549517,Cresselia,Psychic,,600,120,70,120,75,130,85)
(0.328075827854071 1,Feraligatr,Water,,530,85,105,100,79,83,78)
(0.32133910297808144,Dusknoir,Ghost,,525,45,100,135,65,135,45)
(0.32123308850756 18,Lugia,Psychic,Flying,680,106,90,130,90,154,110)
(0.318566992724807 93,Relicanth,Water,Rock,485,100,90,130,45,65,55)
(0.31852856860542667,Gengar,Ghost,Poison,500,60,65,60,130,75,110)
(0.31245184 1100305,Girafarig,Normal,Psychic,455,70,80,65,90,65,85)
(0.31125481 11406813,Spritzee,Fairy,,341,78,52,60,63,65,23)
(0.30959452025552026,Seaking,Water,,450,80,92,65,65,80,68)
(0.3092385839512397,HoopaHoopa Unbound,Psychic,Dark,680,80,160,60,170,130,80)
(0.30833353561 70134,Dragalge,Poison,Dragon,494,65,75,90,97,123,44)
(0.30679527452460764,Gloom,Grass,Poison,395,60,65,70,85,75,40)
(0.30527552148753223,Delphox,Fire,Psychic,534,75,69,72,114,100,104)
(0.30515092998511 24,Groudon,Ground,,670,100,150,140,100,90,90)
(0.30494807388796963,Venusaur,Grass,Poison,525,80,82,83,100,100,80)
(0.30368948499350 17,Hippowdon,Ground,,525,108,112,118,68,72,47)
(0.30143824474229 62,Malamar,Dark,Psychic,482,86,92,88,68,75,73)
(0.3002621956245345,AltariaMega Altaria,Dragon,Fairy,590,75,110,110,110,105,80)
(0.2989809277941925,Beldum,Steel,Psychic,300,40,55,80,35,60,30)
(0.2974799931059552,RotomFan Rotom,Electric,Flying,520,50,65,107,105,107,86)
(0.29712636304216977,Meganium,Grass,,525,80,82,100,83,100,80)
(0.29670695328708896,Dwebble,Bug,Rock,325,50,65,85,35,35,55)
(0.2897156365768919,Venomoth,Bug,Poison,450,70,65,60,90,75,90)
(0.28949 1 1956247116,Chesnaught,Grass,Fighting,530,88,107,122,74,75,64)
(0.28858783794859577,Skarmory,Steel,Flying,465,65,80,140,40,70,70)
(0.28754627663977 34,Kabuto,Rock,Water,355,30,80,90,55,45,55)
(0.28339218060399884,Rhyperior,Ground,Rock,535,115,140,130,55,55,40)
(0.28294928 16887489,KyuremWhite Kyurem,Dragon,Ice,700,125,120,90,170,100,95)
(0.28253935835234545,Geodude,Rock,Ground,300,40,80,100,30,30,20)
(0.28199186931 87399,Lairon,Steel,Rock,430,60,90,140,50,50,40)
(0.28144938215753 57,Dragonite,Dragon,Flying,600,91,134,95,100,100,80)
(0.281 104376249820 9,Blastoise,Water,,530,79,83,100,85,105,78)
(0.27445042215224325,Bronzor,Steel,Psychic,300,57,24,86,24,86,23)
(0.271813411781596,SharpedoMega Sharpedo,Water,Dark,560,70,140,70,110,65,105)
(0.2706640246 15897,Corphish,Water,,308,43,80,65,50,35,35)
(0.2690881924913403,Vullaby,Dark,Flying,370,70,55,75,45,65,60)
(0.2676058630668552,Swalot,Poison,,467,100,73,83,73,83,55)
(0.267072790620821 1,BlazikenMega Blaziken,Fire,Fighting,630,80,160,80,130,80,100)

(0.2658026410297045,Grumpig,Psychic,,470,80,45,65,90,110,80)
(0.263330544975352066,Absol,Dark,,465,65,130,60,75,60,75)
(0.25828608249536233,Bibarel,Normal,Water,410,79,85,60,55,60,71)
(0.25800482433076444,ScizorMega Scizor,Bug,Steel,600,70,150,140,65,100,75)
(0.25192886463179687,Genesect,Bug,Steel,600,71,120,95,120,95,99)
(0.25124328453506684,Hypno,Psychic,,483,85,73,70,73,115,67)
(0.24866484152490276,Moltres,Fire,Flying,580,90,100,90,125,85,90)
(0.24850178187742766,Charmeleon,Fire,,405,58,64,58,80,65,80)
(0.24581280499332725,Croconaw,Water,,405,65,80,80,59,63,58)
(0.24353605742845652,Sableye,Dark,Ghost,380,50,75,75,65,65,50)
(0.24201545585150708,LatiasMega Latias,Dragon,Psychic,700,80,100,120,140,150,110)
(0.23976343775702047,Breloom,Grass,Fighting,460,60,130,80,60,60,70)
(0.23780969083245607,KeldeoOrdinary Forme,Water,Fighting,580,91,72,90,129,90,108)
(0.23461893057093397,Magneton,Electric,Steel,465,50,60,95,120,70,70)
(0.22909899556141122,Gothitelle,Psychic,,490,70,55,95,95,110,65)
(0.22581389463828694,Misdreavus,Ghost,,435,60,60,60,85,85,85)
(0.22455968378765512,Scolipede,Bug,Poison,485,60,100,89,55,69,112)
(0.22242782657867275,Seviper,Poison,,458,73,100,60,100,60,65)
(0.22349540640546606,Stoutland,Normal,,500,85,110,90,45,90,80)
(0.22148449810626858,Skrelp,Poison,Water,320,50,60,60,60,60,30)
(0.22032796061112836,Barbaracle,Rock,Water,500,72,105,115,54,86,68)
(0.218986068402452194,Vigoroth,Normal,,440,80,80,80,55,55,90)
(0.21707906594071137,Slowbro,Water,Psychic,490,95,75,110,100,80,30)
(0.21554272431409638,Milotic,Water,,540,95,60,79,100,125,81)
(0.2136519249065999,Pelipper,Water,Flying,430,60,50,100,85,70,65)
(0.21022963862951127,MawileMega Mawile,Steel,Fairy,480,50,105,125,55,95,50)
(0.20258775531628925,Sandslash,Ground,,450,75,100,110,45,55,65)
(0.20087796859745366,Stunfisk,Ground,Electric,471,109,66,84,81,99,32)
(0.20039116284833014,GourgeistLarge Size,Ghost,Grass,494,75,95,122,58,75,69)
(0.19779217973310836,Lickitung,Normal,,385,90,55,75,60,75,30)
(0.19591989405050336,Ivysaur,Grass,Poison,405,60,62,63,80,80,60)
(0.1940546005696531Mc8,Gardevoir,Psychic,Fairy,518,68,65,65,125,115,80)
(0.1925461120565095,Cofagrigus,Ghost,,483,58,50,145,95,105,30)
(0.19191084304217654,Registeel,Steel,,580,80,75,150,75,150,50)
(0.19142441936276033,Throh,Fighting,,465,120,100,85,30,85,45)
(0.18959436972492072,Magnezone,Electric,Steel,535,70,70,115,130,90,60)
(0.1891034341077951,Dedenne,Electric,Fairy,431,67,58,57,81,67,101)
(0.18860950653751007,PumpkabooAverage Size,Ghost,Grass,335,49,66,70,44,55,51)
(0.17910103899859553,Machamp,Fighting,,505,90,130,80,65,85,55)
(0.1755243577231409,PumpkabooSmall Size,Ghost,Grass,335,44,66,70,44,55,56)
(0.17484170562501777,Forretress,Bug,Steel,465,75,90,140,60,60,40)
(0.17324576465136476,Steelix,Steel,Ground,510,75,85,200,55,65,30)
(0.16978228524235606,Hitmonchan,Fighting,,455,50,105,79,35,110,76)
(0.16948207753667865,Boldore,Rock,,390,70,105,105,50,40,20)
(0.16903832936967822,Clamperl,Water,,345,35,64,85,74,55,32)
(0.1607520536525211,Mawile,Steel,Fairy,380,50,85,85,55,55,50)
(0.15855933164305303,Talonflame,Fire,Flying,499,78,81,71,74,69,126)
(0.15782549688912295,Sewaddle,Bug,Grass,310,45,53,70,40,60,42)
(0.1571469037023825,PumpkabooLarge Size,Ghost,Grass,335,54,66,70,44,55,46)
(0.15450619268342436,GourgeistSmall Size,Ghost,Grass,494,55,85,122,58,75,99)
(0.14672944528172172,Primeape,Fighting,,455,65,105,60,60,70,95)
(0.14602815950887706,DarmanitanZen Mode,Fire,Psychic,540,105,30,105,140,105,55)
(0.14215121173760017,Rampardos,Rock,,495,97,165,60,65,50,58)
(0.14039533993221798,Hawlucha,Fighting,Flying,500,78,92,75,74,63,118)
(0.13859932457422264,Diancie,Rock,Fairy,600,50,100,150,100,150,50)
(0.13765259912436267,Typhlosion,Fire,,534,78,84,78,109,85,100)
(0.13724994417922654,Weavile,Dark,Ice,510,70,120,65,45,85,125)
(0.13193102684178337,Porygon-Z,Normal,,535,85,80,70,135,75,90)
(0.12932739387568648,Litleo,Fire,Normal,369,62,50,58,73,54,72)
(0.12813889042798177,Simipour,Water,,498,75,98,63,98,63,101)
(0.12532136363675017,Sandshrew,Ground,,300,50,75,85,20,30,40)
(0.12466980964772412,Ursaring,Normal,,500,90,130,75,75,75,55)
(0.12003290250197851,Piloswine,Ice,Ground,450,100,100,80,60,60,50)
(0.1182736436152263,MeloettaPirouette Forme,Normal,Fighting,600,100,128,90,77,77,128)
(0.11709121153127056,Scizor,Bug,Steel,500,70,130,100,55,80,65)
(0.11683945826582998,Cubone,Ground,,320,50,50,95,40,50,35)
(0.11456988789619849,Druddigon,Dragon,,485,77,120,90,60,90,48)
(0.11257801769941334,Articuno,Ice,Flying,580,90,85,100,95,125,85)
(0.10951059343259273,Vanilluxe,Ice,,535,71,95,85,110,95,79)
(0.108766124850172453,Gyarados,Water,Flying,540,95,125,79,60,100,81)
(0.10834622423835927,Avalugg,Ice,,514,95,117,184,44,46,28)
(0.1073926642662798,Flareon,Fire,,525,65,130,60,95,110,65)
(0.10725650613779769,Tyrunt,Rock,Dragon,362,58,89,77,45,45,48)
(0.10704929097458693,MedichamMega Medicham,Fighting,Psychic,510,60,100,85,80,85,100)
(0.10570427570215057,Whimsicott,Grass,Fairy,480,60,67,85,77,75,116)
(0.10527078723347916,Maractus,Grass,,461,75,86,67,106,67,60)
(0.10340478340948045,DiancieMega Diancie,Rock,Fairy,700,50,160,110,160,110,110)
(0.1025744977284101,ShayminLand Forme,Grass,,600,100,100,100,100,100,100)

(0.10037964860513604,Diggersby,Normal,Ground,423,85,56,77,50,77,78)
(0.10025256206015354,Koffing,Poison,,340,40,65,95,60,45,35)
(0.09968063841668662,Escavalier,Bug,Steel,495,70,135,105,60,105,20)
(0.09840513837582987,Tentacruel,Water,Poison,515,80,70,65,80,120,100)
(0.09824557994744976,PumpkabooSuper Size,Ghost,Grass,335,59,66,70,44,55,41)
(0.09521490602822325,Togekiss,Fairy,Flying,545,85,50,95,120,115,80)
(0.09402661025592263,Lunatone,Rock,Psychic,440,70,55,65,95,85,70)
(0.09295369112480256,Delcatty,Normal,,380,70,65,65,55,55,70)
(0.09258793188358372,AlakazamMega Alakazam,Psychic,,590,55,50,65,175,95,150)
(0.09102386166748067,HeracrossMega Heracross,Bug,Fighting,600,80,185,115,40,105,75)
(0.08803165106957134,Gligar,Ground,Flying,430,65,75,105,35,65,85)
(0.08534724952590245,Charizard,Fire,Flying,534,78,84,78,109,85,100)
(0.08512769652186913,Eelektross,Electric,,515,85,115,80,105,80,50)
(0.08498711117960459,Golurk,Ground,Ghost,483,89,124,80,55,80,55)
(0.08355801322647083,Combusken,Fire,Fighting,405,60,85,60,85,60,55)
(0.07969171489898474,Furfrou,Normal,,472,75,80,60,65,90,102)
(0.07956169271646174,Togetic,Fairy,Flying,405,55,40,85,80,105,40)
(0.07805364933382841,Omastar,Rock,Water,495,70,60,125,115,70,55)
(0.07794529117253135,Victreebel,Grass,Poison,490,80,105,65,100,70,70)
(0.07774679005776974,Raikou,Electric,,580,90,85,75,115,100,115)
(0.07674480403371475,Espeon,Psychic,,525,65,65,60,130,95,110)
(0.07505896098452569,Swadloon,Bug,Grass,380,55,63,90,50,80,42)
(0.0744117770090823,Haxorus,Dragon,,540,76,147,90,60,70,97)
(0.07304654071988392,Phione,Water,,480,80,80,80,80,80,80)
(0.06891418518645065,Krabby,Water,,325,30,105,90,25,25,50)
(0.06867236120478815,Armaldo,Rock,Bug,495,75,125,100,70,80,45)
(0.0661168825358106,KangaskhanMega Kangaskhan,Normal,,590,105,125,100,60,100,100)
(0.060042330702816726,Wobbuffet,Psychic,,405,190,33,58,33,58,33)
(0.05981292295736029,Honedge,Steel,Ghost,325,45,80,100,35,37,28)
(0.05910916142220879,Bronzong,Steel,Psychic,500,67,89,116,79,116,33)
(0.05601615030035778,Banette,Ghost,,455,64,115,65,83,63,65)
(0.049564139847485644,Gabite,Dragon,Ground,410,68,90,65,50,55,82)
(0.04430423829034136,Tropius,Grass,Flying,460,99,68,83,72,87,51)
(0.0416437374831482,Torterra,Grass,Ground,525,95,109,105,75,85,56)
(0.04143908447363176,PinsirMega Pinsir,Bug,Flying,600,65,155,120,65,90,105)
(0.03014002469280841,Tyranitar,Rock,Dark,600,100,134,110,95,100,61)
(0.02547671891239489,TornadusTherian Forme,Flying,,580,79,100,80,110,90,121)
(0.022751986208125574,Beheeyem,Psychic,,485,75,75,75,125,95,40)
(0.0203787615380113546,Chandelure,Ghost,Fire,520,60,55,90,145,90,80)
(0.019531909726191343,Swablu,Normal,Flying,310,45,40,60,40,75,50)
(0.01848676883224587,Froslass,Ice,Ghost,480,70,80,70,80,70,110)
(0.018465112723736743,Tranquill,Normal,Flying,358,62,77,62,50,42,65)
(0.01727841809084496,Masquerain,Bug,Flying,414,70,60,62,80,82,60)
(0.01429026129014388,Axew,Dragon,,320,46,87,60,30,40,57)
(0.0135972806472352,WormadamPlant Cloak,Bug,Grass,424,60,59,85,79,105,36)
(0.013235157590703706,Fraxure,Dragon,,410,66,117,70,40,50,67)
(0.012914425511188599,Herdier,Normal,,370,65,80,65,35,65,60)
(0.011852008579716578,VenusaurMega Venusaur,Grass,Poison,625,80,100,123,122,120,80)
(0.011287805820420438,Cradily,Rock,Grass,495,86,81,97,81,107,43)
(0.0098422633326445111,Aron,Steel,Rock,330,50,70,100,40,40,30)
(0.009513228483289282,Finneon,Water,,330,49,49,56,49,61,66)

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

Explanation: We will be repeating above two steps again to form the 2nd list.

Command
grunt> random_include2 = foreach selected_list GENERATE RANDOM(),Name,Type1,Type2,Total,HP,Attack,Defense,SpAtk,SpDef,Speed;
grunt> random2_desending = ORDER random_include2 BY $0 DESC;
grunt> dump random2_desending;

```
sahil@ubuntu:~/Desktop$ pig -x mapreduce
17/12/05 14:12:32 INFO pig.ExecTypeProvider: Trying ExecType : LOCAL
17/12/05 14:12:32 INFO pig.ExecTypeProvider: Trying ExecType : MAPREDUCE
17/12/05 14:12:32 INFO pig.ExecTypeProvider: Picked MAPREDUCE as the ExecType
2017-12-05 14:12:32,195 [main] INFO  org.apache.pig.Main - Apache Pig version 0.17.0 (r1797386) compiled Jun 02 2017, 15:41:58
2017-12-05 14:12:32,196 [main] INFO  org.apache.pig.Main - Logging error messages to: /home/sahil/Desktop/pig_1512511952194.log
2017-12-05 14:12:32,247 [main] INFO  org.apache.pig.impl.util.Utils - Default bootup file /home/sahil/.pigbootup not found
2017-12-05 14:12:33,074 [main] INFO  org.apache.hadoop.conf.Configuration.deprecation - mapred.job.tracker is deprecated. Instead, use mapreduce.
jobtracker.address
2017-12-05 14:12:33,074 [main] INFO  org.apache.pig.backend.hadoop.executionengine.HExecutionEngine - Connecting to hadoop file system at: hdfs:/
/localhost:9000
2017-12-05 14:12:33,687 [main] INFO  org.apache.pig.PigServer - Pig Script ID for the session: PIG-default-5fd167e6-2b13-45d0-be0a-17be6b9bef84
2017-12-05 14:12:33,687 [main] WARN  org.apache.pig.PigServer - ATS is disabled since yarn.timeline-service.enabled set to false
grunt> Load_Data = LOAD '/u01/hadoop/Pig/Pokemon_usecase/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);
grunt> selected_list = FILTER Load_Data BY Defense>55;
grunt> random_include2 = foreach selected_list GENERATE RANDOM(),Name,Type1,Type2,Total,HP,Attack,Defense,SpAtk,SpDef,Speed;
grunt> random2_desending = ORDER random_include2 BY $0 DESC;
grunt> dump random2_desending;
```

Results:-

```
sahil@ubuntu: ~/Desktop
2017-12-05 14:16:31,723 [main] INFO  org.apache.pig.backend.hadoop.executionengine.util.MapR
(0.9986992220228815,Whimsicott,Grass,Fairy,480,60,67,85,77,75,116)
(0.9960146576024744,Gastrodon,Water,Ground,475,111,83,68,92,82,39)
(0.9953617141814203,Lugia,Psychic,Flying,680,106,90,130,90,154,110)
(0.994861649420029,Swadloon,Bug,Grass,380,55,63,90,50,80,42)
(0.9948139530927126,BanetteMega Banette,Ghost,,555,64,165,75,93,83,75)
(0.9914841340364027,Klefki,Steel,Fairy,470,57,80,91,80,87,75)
(0.9914825644930669,Alomomola,Water,,470,165,75,80,40,45,65)
(0.9909066236390535,Scrafty,Dark,Fighting,488,65,90,115,45,115,58)
(0.9875415702615785,PumpkabooLarge Size,Ghost,Grass,335,54,66,70,44,55,46)
(0.9866690230855841,Gardevoir,Psychic,Fairy,518,68,65,65,125,115,80)
(0.9809949343346849,Swirlix,Fairy,,341,62,48,66,59,57,49)
(0.9786238118049077,Roggenrola,Rock,,280,55,75,85,25,25,15)
(0.9780012904847034,Shelmet,Bug,,305,50,40,85,40,65,25)
(0.9680175310746829,Jumpluff,Grass,Flying,460,75,55,70,55,95,110)
(0.967858928118871,PidgeotMega Pidgeot,Normal,Flying,579,83,80,80,135,80,121)
(0.9664105362236255,Volcarona,Bug,Fire,550,85,60,65,135,105,100)
(0.9652984798306817,Chesnaught,Grass,Fighting,530,88,107,122,74,75,64)
(0.9650807636910745,Magcargo,Fire,Rock,410,50,50,120,80,80,30)
(0.9645941093328251,Xerneas,Fairy,,680,126,131,95,131,98,99)
(0.9643313373338264,Greninja,Water,Dark,530,72,95,67,103,71,122)
(0.9637161148054751,Tyrantrum,Rock,Dragon,521,82,121,119,69,59,71)
(0.9585364963948163,MeowsticFemale,Psychic,,466,74,48,76,83,81,104)
(0.9576532848359715,Rhyperior,Ground,Rock,535,115,140,130,55,55,40)
(0.9571519570669695,LucarioMega Lucario,Fighting,Steel,625,70,145,88,140,70,112)
(0.956342443140133,Rhyhorn,Ground,Rock,345,80,85,95,30,30,25)
(0.9547836316291801,Registeel,Steel,,580,80,75,150,75,150,50)
(0.9478428277627399,AmpharosMega Ampharos,Electric,Dragon,610,90,95,105,165,110,45)
(0.9468077830380153,Pancham,Fighting,,348,67,82,62,46,48,43)
(0.94667525697764422,Simipour,Water,,498,75,98,63,98,63,101)
(0.945738038663497,Skarmory,Steel,Flying,465,65,80,140,40,70,70)
(0.9416412713491533,Goldeen,Water,,320,45,67,60,35,50,63)
(0.9405019712974102,Aggron,Steel,Rock,530,70,110,180,60,60,50)
(0.9395169578002148,Phione,Water,,480,80,80,80,80,80,80)
(0.9352695714216317,Steelix,Steel,Ground,510,75,85,200,55,65,30)
(0.9344892980495104,Togepi,Fairy,,245,35,20,65,40,65,20)
(0.9312951417089554,CharizardMega Charizard X,Fire,Dragon,634,78,130,111,130,85,100)
(0.9311948809573293,Zebstrika,Electric,,497,75,100,63,80,63,116)
(0.9294664425005777,Sigilyph,Psychic,Flying,490,72,58,80,103,80,97)
(0.9274018542091708,Cinccino,Normal,,470,75,95,60,65,60,115)
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(0.9986992220228815,Whimsicott,Grass,Fairy,480,60,67,85,77,75,116)
(0.9960146576024744,Gastrodon,Water,Ground,475,111,83,68,92,82,39)
(0.9953617141814203,Lugia,Psychic,Flying,680,106,90,130,90,154,110)
(0.994861649420029,Swadloon,Bug,Grass,380,55,63,90,50,80,42)
(0.9948139530927126,BanetteMega Banette,Ghost,,555,64,165,75,93,83,75)
(0.9914841340364027,Klefki,Steel,Fairy,470,57,80,91,80,87,75)
(0.9914825644930669,Alomomola,Water,,470,165,75,80,40,45,65)
(0.9909066236390535,Scrafty,Dark,Fighting,488,65,90,115,45,115,58)
(0.9875415702615785,PumpkabooLarge Size,Ghost,Grass,335,54,66,70,44,55,46)
(0.9866690230855841,Gardevoir,Psychic,Fairy,518,68,65,65,125,115,80)
(0.9809949343346849,Swirlix,Fairy,,341,62,48,66,59,57,49)

(0.9786238118049077,Roggenrola,Rock,,280,55,75,85,25,25,15)
(0.9780012904847034,Shelmet,Bug,,305,50,40,85,40,65,25)
(0.9680175310746829,Jumpluff,Grass,Flying,460,75,55,70,55,95,110)
(0.9678589928118871,PidgeotMega Pidgeot,Normal,Flying,579,83,80,80,135,80,121)
(0.9664105362236255,Volcarona,Bug,Fire,550,85,60,65,135,105,100)
(0.9652984798306817,Chesnaught,Grass,Fighting,530,88,107,122,74,75,64)
(0.9650807636910745,Magcargo,Fire,Rock,410,50,50,120,80,80,30)
(0.9645941093328251,Xerneas,Fairy,,680,126,131,95,131,98,99)
(0.9643313373338264,Greninja,Water,Dark,530,72,95,67,103,71,122)
(0.9637161148054751,Tyrantrum,Rock,Dragon,521,82,121,119,69,59,71)
(0.9585364963948163,MeowsticFemale,Psychic,,466,74,48,76,83,81,104)
(0.9576532848359715,Rhyperior,Ground,Rock,535,115,140,130,55,55,40)
(0.9571519570669695,LucarioMega Lucario,Fighting,Steel,625,70,145,88,140,70,112)
(0.956342443140133,Rhyhorn,Ground,Rock,345,80,85,95,30,30,25)
(0.9547836316291801,Registeel,Steel,,580,80,75,150,75,150,50)
(0.9478428277627399,AmpharosMega Ampharos,Electric,Dragon,610,90,95,105,165,110,45)
(0.9468077830380153,Pancham,Fighting,,348,67,82,62,46,48,43)
(0.9466752569764422,Simipour,Water,,498,75,98,63,98,63,101)
(0.945738038663497,Skarmory,Steel,Flying,465,65,80,140,40,70,70)
(0.9416412713491533,Goldeen,Water,,320,45,67,60,35,50,63)
(0.9405019712974102,Aggron,Steel,Rock,530,70,110,180,60,60,50)
(0.9395169578002148,Phione,Water,,480,80,80,80,80,80,80)
(0.9352695714216317,Steelix,Steel,Ground,510,75,85,200,55,65,30)
(0.9344892980495104,Togepi,Fairy,,245,35,20,65,40,65,20)
(0.9312951417089554,CharizardMega Charizard X,Fire,Dragon,634,78,130,111,130,85,100)
(0.9311948809573293,Zebstrika,Electric,,497,75,100,63,80,63,116)
(0.9294664425005777,Sigilyph,Psychic,Flying,490,72,58,80,103,80,97)
(0.9274018542091708,Cinccino,Normal,,470,75,95,60,65,60,115)
(0.9266014919623875,MewtwoMega Mewtwo X,Psychic,Fighting,780,106,190,100,154,100,130)
(0.9260510724244863,ShayminSky Forme,Grass,Flying,600,100,103,75,120,75,127)
(0.9259031778647482,Krookodile,Ground,Dark,519,95,117,80,65,70,92)
(0.9256592644330643,Geodude,Rock,Ground,300,40,80,100,30,30,20)
(0.9255500931642665,Mienshao,Fighting,,510,65,125,60,95,60,105)
(0.9242581084104934,Corphish,Water,,308,43,80,65,50,35,35)
(0.9241621937554731,Golem,Rock,Ground,495,80,120,130,55,65,45)
(0.9200166048701693,Bisharp,Dark,Steel,490,65,125,100,60,70,70)
(0.9178017837097557,Swanna,Water,Flying,473,75,87,63,87,63,98)
(0.914316150251886,Rampardos,Rock,,495,97,165,60,65,50,58)
(0.9116842709330006,Florges,Fairy,,552,78,65,68,112,154,75)
(0.9111412996777445,Banette,Ghost,,455,64,115,65,83,63,65)
(0.9099234853787052,Cofagrigus,Ghost,,483,58,50,145,95,105,30)
(0.9086389445901614,HoopaHoopa Unbound,Psychic,Dark,680,80,160,60,170,130,80)
(0.9084993489402586,Ursaring,Normal,,500,90,130,75,75,75,55)
(0.9010740852948574,Shroomish,Grass,,295,60,40,60,40,60,35)
(0.9010701566538413,Shiftry,Grass,Dark,480,90,100,60,90,60,80)
(0.8981458274037961,Carbink,Rock,Fairy,500,50,50,150,50,150,50)
(0.8966699287528183,Ivysaur,Grass,Poison,405,60,62,63,80,80,60)
(0.8951445684467259,SalamenceMega Salamence,Dragon,Flying,700,95,145,130,120,90,120)
(0.8946980331530128,KyogrePrimal Kyogre,Water,,770,100,150,90,180,160,90)
(0.893953990682576,ManectricMega Manectric,Electric,,575,70,75,80,135,80,135)
(0.8876858538750412,Delcatty,Normal,,380,70,65,65,55,55,70)
(0.8859064812332796,Mewtwo,Psychic,,680,106,110,90,154,90,130)
(0.8855558017996198,ShayminLand Forme,Grass,,600,100,100,100,100,100,100)
(0.8844562629772728,Metang,Steel,Psychic,420,60,75,100,55,80,50)
(0.8827267396839692,Mismagius,Ghost,,495,60,60,60,105,105,105)
(0.881259693917037,Piloswine,Ice,Ground,450,100,100,80,60,60,50)
(0.8806114247785519,Heatmor,Fire,,484,85,97,66,105,66,65)
(0.8757061541535353,Braviary,Normal,Flying,510,100,123,75,57,75,80)
(0.8755751638394266,Watchog,Normal,,420,60,85,69,60,69,77)
(0.8715932277780761,LopunnyMega Lopunny,Normal,Fighting,580,65,136,94,54,96,135)
(0.8713239655802808,Cobalion,Steel,Fighting,580,91,90,129,90,72,108)
(0.8706853916497764,Lanturn,Water,Electric,460,125,58,58,76,76,67)
(0.868406989287873,Claydol,Ground,Psychic,500,60,70,105,70,120,75)
(0.8647482789949227,Probopass,Rock,Steel,525,60,55,145,75,150,40)
(0.8647002239143418,Excadrill,Ground,Steel,508,110,135,60,50,65,88)
(0.8641254592331036,Tropius,Grass,Flying,460,99,68,83,72,87,51)
(0.8606407245043 99,Bergmite,Ice,,304,55,69,85,32,35,28)
(0.8601941677492358,Clamperl,Water,,345,35,64,85,74,55,32)
(0.85835307948815,Cresselia,Psychic,,600,120,70,120,75,130,85)
(0.854851797228852,Shieldon,Rock,Steel,350,30,42,118,42,88,30)
(0.8507115310260454,DeoxysDefense Forme,Psychic,,600,50,70,160,70,160,90)
(0.8462704405508108,Forretress,Bug,Steel,465,75,90,140,60,60,40)
(0.8442278706630287,Arbok,Poison,,438,60,85,69,65,79,80)
(0.8423396244130603,Exeggcute,Grass,Psychic,325,60,40,80,60,45,40)
(0.8405729007722571,GardevoirMega Gardevoir,Psychic,Fairy,618,68,85,65,165,135,100)
(0.8364325656545198,Weavile,Dark,Ice,510,70,120,65,45,85,125)
(0.8357717539760824,Amoonguss,Grass,Poison,464,114,85,70,85,80,30)
(0.8357291785461365,Dragalge,Poison,Dragon,494,65,75,90,97,123,44)

(0.8347349654070589,Aerodactyl,Rock,Flying,515,80,105,65,60,75,130)
(0.8346310406025313,Furret,Normal,,415,85,76,64,45,55,90)
(0.8289075822798844,Arcanine,Fire,,555,90,110,80,100,80,95)
(0.8284074909099308,Koffing,Poison,,340,40,65,95,60,45,35)
(0.8249522210374063,Magmortar,Fire,,540,75,95,67,125,95,83)
(0.8208017239899138,RotomWash Rotom,Electric,Water,520,50,65,107,105,107,86)
(0.8193387208879835,ScizorMega Scizor,Bug,Steel,600,70,150,140,65,100,75)
(0.8184519068848278,Absol,Dark,,465,65,130,60,75,60,75)
(0.814541295443091,Porygon2,Normal,,515,85,80,90,105,95,60)
(0.8141024224350712,Seismitoad,Water,Ground,509,105,95,75,85,75,74)
(0.8136681815118963,Azumarill,Water,Fairy,420,100,50,80,60,80,50)
(0.813090310367872,Raikou,Electric,,580,90,85,75,115,100,115)
(0.8114996151974083,AudinoMega Audino,Normal,Fairy,545,103,60,126,80,126,50)
(0.8085655749459951,Crobat,Poison,Flying,535,85,90,80,70,80,130)
(0.8054143649498506,SlowbroMega Slowbro,Water,Psychic,590,95,75,180,130,80,30)
(0.8007621290622705,Axew,Dragon,,320,46,87,60,30,40,57)
(0.8006217789005758,Spewpa,Bug,,213,45,22,60,27,30,29)
(0.7949914949905854,Croconaw,Water,,405,65,80,80,59,63,58)
(0.7947895324344985,Groudon,Ground,,670,100,150,140,100,90,90)
(0.7944873224881134,Exploud,Normal,,490,104,91,63,91,73,68)
(0.7859645312867652,CharizardMega Charizard Y,Fire,Flying,634,78,104,78,159,115,100)
(0.7859352028714645,Omastar,Rock,Water,495,70,60,125,115,70,55)
(0.7857587370863096,PumpkabooSuper Size,Ghost,Grass,335,59,66,70,44,55,41)
(0.7842635141831158,WormadamSandy Cloak,Bug,Ground,424,60,79,105,59,85,36)
(0.7808197295552108,Espeon,Psychic,,525,65,65,60,130,95,110)
(0.7741426107376607,Gyarados,Water,Flying,540,95,125,79,60,100,81)
(0.7730906546645362,KyuremBlack Kyurem,Dragon,Ice,700,125,170,100,120,90,95)
(0.7717998022253038,Hitmontop,Fighting,,455,50,95,95,35,110,70)
(0.7694090591928675,Latias,Dragon,Psychic,600,80,80,90,110,130,110)
(0.7692098013306757,Zekrom,Dragon,Electric,680,100,150,120,120,100,90)
(0.7665994693535547,GourgeistSmall Size,Ghost,Grass,494,55,85,122,58,75,99)
(0.7636516113900921,Simisear,Fire,,498,75,98,63,98,63,101)
(0.7634530007287506,DarmanitanZen Mode,Fire,Psychic,540,105,30,105,140,105,55)
(0.7623866189449466,Venusaur,Grass,Poison,525,80,82,83,100,100,80)
(0.7610496815167651,Entei,Fire,,580,115,115,85,90,75,100)
(0.7606921073944106,Durant,Bug,Steel,484,58,109,112,48,48,109)
(0.756684228709624,Bayleef,Grass,,405,60,62,80,63,80,60)
(0.7549357731125586,Prinplup,Water,,405,64,66,68,81,76,50)
(0.7486834513406759,Unfezant,Normal,Flying,488,80,115,80,65,55,93)
(0.7483587986540191,Kabutops,Rock,Water,495,60,115,105,65,70,80)
(0.7479001607653449,Beheeyem,Psychic,,485,75,75,75,125,95,40)
(0.7461696023435642,Blaziken,Fire,Fighting,530,80,120,70,110,70,80)
(0.7418978474940039,Starmie,Water,Psychic,520,60,75,85,100,85,115)
(0.7409073246217401,Zangoose,Normal,,458,73,115,60,60,60,90)
(0.7406122379437148,Articuno,Ice,Flying,580,90,85,100,95,125,85)
(0.7386739786434433,GiratinaAltered Forme,Ghost,Dragon,680,150,100,120,100,120,90)
(0.7368744604339865,Druddigon,Dragon,,485,77,120,90,60,90,48)
(0.7364167579888989,Squirtle,Water,,314,44,48,65,50,64,43)
(0.73634296705178,Masquerain,Bug,Flying,414,70,60,62,80,82,60)
(0.73595023561116486,PumpkabooSmall Size,Ghost,Grass,335,44,66,70,44,55,56)
(0.7354560963907686,Gallade,Psychic,Fighting,518,68,125,65,65,115,80)
(0.7350868795167678,Victreebel,Grass,Poison,490,80,105,65,100,70,70)
(0.7294286664207366,Yveltal,Dark,Flying,680,126,131,95,131,98,99)
(0.7258974027927005,DiancieMega Diancie,Rock,Fairy,700,50,160,110,160,110,110)
(0.7252122746987938,Escavalier,Bug,Steel,495,70,135,105,60,105,20)
(0.7238032401558796,Drapion,Poison,Dark,500,70,90,110,60,75,95)
(0.723779492822612,Abomasnow,Grass,Ice,494,90,92,75,92,85,60)
(0.7212836369160506,Chimecho,Psychic,,425,65,50,70,95,80,65)
(0.718979992053728,Zygarde50% Forme,Dragon,Ground,600,108,100,121,81,95,95)
(0.7182574577018854,Breloom,Grass,Fighting,460,60,130,80,60,60,70)
(0.7174893444261764,Cacturne,Grass,Dark,475,70,115,60,115,60,55)
(0.7173498974479442,Bronzor,Steel,Psychic,300,57,24,86,24,86,23)
(0.7141019696439357,Furfrou,Normal,,472,75,80,60,65,90,102)
(0.7132474504451742,Gigalith,Rock,,515,85,135,130,60,80,25)
(0.7105349930728564,Mesprit,Psychic,,580,80,105,105,105,105,80)
(0.7103321480395703,Seaking,Water,,450,80,92,65,65,80,68)
(0.7090945779253666,Luxray,Electric,,523,80,120,79,95,79,70)
(0.7053656577225047,Pyroar,Fire,Normal,507,86,68,72,109,66,106)
(0.7029730471374759,Nidorina,Poison,,365,70,62,67,55,55,56)
(0.7029683162860334,Rayquaza,Dragon,Flying,680,105,150,90,150,90,95)
(0.6994899577047125,HoopaHoopa Confined,Psychic,Ghost,600,80,110,60,150,130,70)
(0.6944489158941783,Tauros,Normal,,490,75,100,95,40,70,110)
(0.6912116589042714,Regigigas,Normal,,670,110,160,110,80,110,100)
(0.6897215580811393,Braixen,Fire,,409,59,59,58,90,70,73)
(0.6840535628442336,Miltank,Normal,,490,95,80,105,40,70,100)
(0.6810135112855155,Rotom,Electric,Ghost,440,50,50,77,95,77,91)
(0.6789283971242411,Tyrunt,Rock,Dragon,362,58,89,77,45,45,48)
(0.67651249288829367,Magneton,Electric,Steel,465,50,60,95,120,70,70)

(0.67537548546639,BlastoiseMega Blastoise,Water,,630,79,103,120,135,115,78)
(0.6746026960779047,Medicham,Fighting,Psychic,410,60,60,75,60,75,80)
(0.6743583252957043,Electabuzz,Electric,,490,65,83,57,95,85,105)
(0.6733870367039853,MawileMega Mawile,Steel,Fairy,480,50,105,125,55,95,50)
(0.6719907067628649,Golduck,Water,,500,80,82,78,95,80,85)
(0.671248721029293,Klink,Steel,,300,40,55,70,45,60,30)
(0.6682026769353612,Onix,Rock,Ground,385,35,45,160,30,45,70)
(0.667855833394627l2,Ambipom,Normal,,482,75,100,66,60,66,115)
(0.6658536175547344,Rhydon,Ground,Rock,485,105,130,120,45,45,40)
(0.664616793356236,Porygon,Normal,,395,65,60,70,85,75,40)
(0.66189687725643363,Ninetales,Fire,,505,73,76,75,81,100,100)
(0.6595232605689313,Poliwhirl,Water,,385,65,65,65,50,50,90)
(0.6595073781351773,Seadra,Water,,440,55,65,95,95,45,85)
(0.6571191975349461,Pineco,Bug,,290,50,65,90,35,35,15)
(0.6567440998541759,GiratinaOrigin Forme,Ghost,Dragon,680,150,120,100,120,100,90)
(0.655825843652002,Bonsly,Rock,,290,50,80,95,10,45,10)
(0.655020508800544,Clauncher,Water,,330,50,53,62,58,63,44)
(0.6511941926158901,Dewott,Water,,413,75,75,60,83,60,60)
(0.6511451584605478,Emolga,Electric,Flying,428,55,75,60,75,60,103)
(0.6500953234884501,AbomasnowMega Abomasnow,Grass,Ice,594,90,132,105,132,105,30)
(0.6480709755237781,Genesect,Bug,Steel,600,71,120,95,120,95,99)
(0.6475084222935396,Herdier,Normal,,370,65,80,65,35,65,60)
(0.6454742441317096,Glaceon,Ice,,525,65,60,110,130,95,65)
(0.6452180722415028,Krabby,Water,,325,30,105,90,25,25,50)
(0.6438074168714402,Maractus,Grass,,461,75,86,67,106,67,60)
(0.6435845257280937,Machoke,Fighting,,405,80,100,70,50,60,45)
(0.6398305346546579,Persian,Normal,,440,65,70,60,65,65,115)
(0.6392595147948458,Lapras,Water,Ice,535,130,85,80,85,95,60)
(0.6382206995578489,Garbodor,Poison,,474,80,95,82,60,82,75)
(0.6380426337027123,Skorupi,Poison,Bug,330,40,50,90,30,55,65)
(0.6370224043045614,Ferrothorn,Grass,Steel,489,74,94,131,54,116,20)
(0.6321970585236542,Carnivine,Grass,,454,74,100,72,90,72,46)
(0.6274734393736401,Simisage,Grass,,498,75,98,63,98,63,101)
(0.6270580769311523,Umbreon,Dark,,525,95,65,110,60,130,65)
(0.6248272900792847,Magnemite,Electric,Steel,325,25,35,70,95,55,45)
(0.6225081054438761,Corsola,Water,Rock,380,55,55,85,65,85,35)
(0.6223916469433333,Scizor,Bug,Steel,500,70,130,100,55,80,65)
(0.6210704718322495,Stantler,Normal,,465,73,95,62,85,65,85)
(0.6189050310565276,Slowbro,Water,Psychic,490,95,75,110,100,80,30)
(0.6160275827229955,Regice,Ice,,580,80,50,100,100,200,50)
(0.6155254561502115,Lileep,Rock,Grass,355,66,41,77,61,87,23)
(0.6143540097822398,Gothorita,Psychic,,390,60,45,70,75,85,55)
(0.611194041486275,Hariyama,Fighting,,474,144,120,60,40,60,50)
(0.6084615216722205,WormadamTrash Cloak,Bug,Steel,424,60,69,95,69,95,36)
(0.6081165827726669,Machamp,Fighting,,505,90,130,80,65,85,55)
(0.6078225152945226,Zapdos,Electric,Flying,580,90,90,85,125,90,100)
(0.6072490670367545,Reshiram,Dragon,Fire,680,100,120,100,150,120,90)
(0.6062376607897514,Aurorus,Rock,Ice,521,123,77,72,99,92,58)
(0.6057873598653796,Chespin,Grass,,313,56,61,65,48,45,38)
(0.6018355130010118,Sudowoodo,Rock,,410,70,100,115,30,65,30)
(0.6013708757852769,Bronzong,Steel,Psychic,500,67,89,116,79,116,33)
(0.5921996681823434,Terrakion,Rock,Fighting,580,91,129,90,72,90,108)
(0.5908642668422128,Klinklang,Steel,,520,60,100,115,70,85,90)
(0.5893415520192753,MeowsticMale,Psychic,,466,74,48,76,83,81,104)
(0.5825516148473412,Dunsparce,Normal,,415,100,70,70,65,65,45)
(0.5802144254723928,Swellow,Normal,Flying,430,60,85,60,50,50,125)
(0.5800308267060315,Doublade,Steel,Ghost,448,59,110,150,45,49,35)
(0.5731120408662559,Manaphy,Water,,600,100,100,100,100,100,100)
(0.5730123905877212,SceptileMega Sceptile,Grass,Dragon,630,70,110,75,145,85,145)
(0.5682247633727525,Virizion,Grass,Fighting,580,91,90,72,90,129,108)
(0.5668566165279847,Porygon-Z,Normal,,535,85,80,70,135,75,90)
(0.5620173917713246,Bastiodon,Rock,Steel,495,60,52,168,47,138,30)
(0.5584977305258193,Togetic,Fairy,Flying,405,55,40,85,80,105,40)
(0.5574628743961799,Lairon,Steel,Rock,430,60,90,140,50,50,40)
(0.5537668126525526,Trubbish,Poison,,329,50,50,62,40,62,65)
(0.5516802599543204,Moltres,Fire,Flying,580,90,100,90,125,85,90)
(0.5480438984157118,SwampertMega Swampert,Water,Ground,635,100,150,110,95,110,70)
(0.547652910835463,Scolipede,Bug,Poison,485,60,100,89,55,69,112)
(0.5471184732973062,Phanpy,Ground,,330,90,60,60,40,40,40)
(0.5453706621613954,KyuremWhite Kyurem,Dragon,Ice,700,125,120,90,170,100,95)
(0.5449473585816716,Lickilicky,Normal,,515,110,85,95,80,95,50)
(0.5412691344413378,Pelipper,Water,Flying,430,60,50,100,85,70,65)
(0.540195243475627,Gothitelle,Psychic,,490,70,55,95,95,110,65)
(0.5338538164111897,Metagross,Steel,Psychic,600,80,135,130,95,90,70)
(0.5307064628389873,Dedenne,Electric,Fairy,431,67,58,57,81,67,101)
(0.5246067486530063,Victini,Psychic,Fire,600,100,100,100,100,100,100)
(0.5244945956594199,Slakoth,Normal,,280,60,60,60,35,35,30)
(0.5199114281439613,Conkeldurr,Fighting,,505,105,140,95,55,65,45)

(0.51704109576653545,Bellossom,Grass,,490,75,80,95,90,100,50)
(0.51443601239676506,Mightyena,Dark,,420,70,90,70,60,60,70)
(0.5143222002091361,Golurk,Ground,Ghost,483,89,124,80,55,80,55)
(0.5143052459884547,Duskull,Ghost,,295,20,40,90,30,90,25)
(0.5113059558145516,Nidoqueen,Poison,Ground,505,90,92,87,75,85,76)
(0.5109893091063126,Fraxure,Dragon,,410,66,117,70,40,50,67)
(0.5107043045863074,Nidoking,Poison,Ground,505,81,102,77,85,75,85)
(0.5087598968532019,Poliwrath,Water,Fighting,510,90,95,95,70,90,70)
(0.506857615326738,HoundoomMega Houndoom,Dark,Fire,600,75,90,90,140,90,115)
(0.502612568692368,Vileplume,Grass,Poison,490,75,80,85,110,90,50)
(0.5020948200907278,Torterra,Grass,Ground,525,95,109,105,75,85,56)
(0.50188565733063735,Linoone,Normal,,420,78,70,61,50,61,100)
(0.49944305445809245,GyaradosMega Gyarados,Water,Dark,640,95,155,109,70,130,81)
(0.49898291154553487,Kangaskhan,Normal,,490,105,95,80,40,80,90)
(0.49521646054680624,Delphox,Fire,Psychic,534,75,69,72,114,100,104)
(0.49407219306310035,Beldum,Steel,Psychic,300,40,55,80,35,60,30)
(0.4931372334904155,Chikorita,Grass,,318,45,49,65,49,65,45)
(0.4927510447617237,Dragonair,Dragon,,420,61,84,65,70,70,70)
(0.49146479662800757,GalladeMega Gallade,Psychic,Fighting,618,68,165,95,65,115,110)
(0.489149284721458,Vespiquen,Bug,Flying,474,70,80,102,80,102,40)
(0.48854882963905466,Zweilous,Dark,Dragon,420,72,85,70,65,70,58)
(0.48789921095020883,Graveler,Rock,Ground,390,55,95,115,45,45,35)
(0.487391924172482,Diggersby,Normal,Ground,423,85,56,77,50,77,78)
(0.4860842246258186,Lampent,Ghost,Fire,370,60,40,60,95,60,55)
(0.48572074048311615,Donphan,Ground,,500,90,120,120,60,60,50)
(0.48392380682927284,MeloettaPirouette Forme,Normal,Fighting,600,100,128,90,77,77,128)
(0.48358085150596497,Kabuto,Rock,Water,355,30,80,90,55,45,55)
(0.48344985606819857,Sceptile,Grass,,530,70,85,65,105,85,120)
(0.4802802835321618,Celebi,Psychic,Grass,600,100,100,100,100,100,100)
(0.4793039006630385,Feraligatr,Water,,530,85,105,100,79,83,78)
(0.4791371063510388,Scraggy,Dark,Fighting,348,50,75,70,35,70,48)
(0.47737327523085904,Ariados,Bug,Poison,390,70,90,70,60,60,40)
(0.47716794251568495,Slaking,Normal,,670,150,160,100,95,65,100)
(0.476668821919184,Diancie,Rock,Fairy,600,50,100,150,100,150,50)
(0.4766321688762529,Ludicolo,Water,Grass,480,80,70,70,90,100,70)
(0.4748866212991285,Tentacruel,Water,Poison,515,80,70,65,80,120,100)
(0.47121714978222196,Pangoro,Fighting,Dark,495,95,124,78,69,71,58)
(0.46377928917178957,Vigoroth,Normal,,440,80,80,80,55,55,90)
(0.46372404662107747,Avalugg,Ice,,514,95,117,184,44,46,28)
(0.4605232861762411,Typhlosion,Fire,,534,78,84,78,109,85,100)
(0.46038297799274686,RotomMow Rotom,Electric,Grass,520,50,65,107,105,107,86)
(0.45951524933365095,KeldeoOrdinary Forme,Water,Fighting,580,91,72,90,129,90,108)
(0.45418578626365635,Marowak,Ground,,425,60,80,110,50,80,45)
(0.45311211093074544,Arceus,Normal,,720,120,120,120,120,120,120)
(0.44470846186757389,Huntail,Water,,485,55,104,105,94,75,52)
(0.44677718017727697,Binacle,Rock,Water,306,42,52,67,39,56,50)
(0.44568970486070447,Chandelure,Ghost,Fire,520,60,55,90,145,90,80)
(0.44268551001002565,Jellicent,Water,Ghost,480,100,60,70,85,105,60)
(0.4419204739558208,Charizard,Fire,Flying,534,78,84,78,109,85,100)
(0.4400559005871144,Armaldo,Rock,Bug,495,75,125,100,70,80,45)
(0.43777759172396824,Dodrio,Normal,Flying,460,60,110,70,60,60,100)
(0.4375739753881476,Regirock,Rock,,580,80,100,200,50,100,50)
(0.4342879273561061,Gabite,Dragon,Ground,410,68,90,65,50,55,82)
(0.43373612435200026,Gurdurr,Fighting,,405,85,105,85,40,50,40)
(0.42927609740653383,Roserade,Grass,Poison,515,60,70,65,125,105,90)
(0.42855298673482756,DeoxysSpeed Forme,Psychic,,600,50,95,90,95,90,180)
(0.4276034866040834,Boldore,Rock,,390,70,105,105,50,40,20)
(0.42562113576651517,Dewgong,Water,Ice,475,90,70,80,70,95,70)
(0.4228518802211736,Gligar,Ground,Flying,430,65,75,105,35,65,85)
(0.42205975720353084,Throh,Fighting,,465,120,100,85,30,85,45)
(0.4210231278079687,Palkia,Water,Dragon,680,90,120,100,150,120,100)
(0.41743926797888115,Xatu,Psychic,Flying,470,65,75,70,95,70,95)
(0.41668579730841004,Golbat,Poison,Flying,455,75,80,70,65,75,90)
(0.4165578323800855,Archeops,Rock,Flying,567,75,140,65,112,65,110)
(0.4152227479321777,Totodile,Water,,314,50,65,64,44,48,43)
(0.4148814976295587,Beartic,Ice,,485,95,110,80,70,80,50)
(0.41315724200619053,VenusaurMega Venusaur,Grass,Poison,625,80,100,123,122,120,80)
(0.4117741275668899,Gorebyss,Water,,485,55,84,105,114,75,52)
(0.40688029603015075,Mawile,Steel,Fairy,380,50,85,85,55,55,50)
(0.4059665037605886,Lunatone,Rock,Psychic,440,70,55,65,95,85,70)
(0.40469426688297616,Toxicroak,Poison,Fighting,490,83,106,65,86,65,85)
(0.40325116508974945,Raticate,Normal,,413,55,81,60,50,70,97)
(0.40310472425739197,Dustox,Bug,Poison,385,60,50,70,50,90,65)
(0.4005841709964829,Pupitar,Rock,Ground,410,70,84,70,65,70,51)
(0.3996202290992674,Slowpoke,Water,Psychic,315,90,65,65,40,40,15)
(0.3990025388800047,Bouffalant,Normal,,490,95,110,95,40,95,55)
(0.39168730410727515,Politoed,Water,,500,90,75,75,90,100,70)
(0.3903108598720739,Horsea,Water,,295,30,40,70,70,25,60)

(0.38909229583898197,AltariaMega Altaria,Dragon,Fairy,590,75,110,110,110,105,80)
(0.3882849647558909,Wartortle,Water,,405,59,63,80,65,80,58)
(0.38742524201662865,Venipede,Bug,Poison,260,30,45,59,30,39,57)
(0.38228248591779324,Slowking,Water,Psychic,490,95,75,80,100,110,30)
(0.38209954783144107,Castform,Normal,,420,70,70,70,70,70,70)
(0.38091775496805347,Pawniard,Dark,Steel,340,45,85,70,40,40,60)
(0.38042297463975794,Finneon,Water,,330,49,49,56,49,61,66)
(0.3798820680425351,Basculin,Water,,460,70,92,65,80,55,98)
(0.37956103104804195,Blastoise,Water,,530,79,83,100,85,105,78)
(0.37485152777175434,AegislashShield Forme,Steel,Ghost,520,60,50,150,50,150,60)
(0.37236020385389457,Venomoth,Bug,Poison,450,70,65,60,90,75,90)
(0.37135101844515084,Sealeo,Ice,Water,410,90,60,70,75,70,45)
(0.36773915516003775,PumpkabooAverage Size,Ghost,Grass,335,49,66,70,44,55,51)
(0.36609065008675146,Mandibuzz,Dark,Flying,510,110,65,105,55,95,80)
(0.36070207169524715,Talonflame,Fire,Flying,499,78,81,71,74,69,126)
(0.3585236696750803,Granbull,Fairy,,450,90,120,75,60,60,45)
(0.35237535712921375,Kyurem,Dragon,Ice,660,125,130,90,130,90,95)
(0.35182619852216192,Hitmonchan,Fighting,,455,50,105,79,35,110,76)
(0.34501463824841894,Zoroark,Dark,,510,60,105,60,120,60,105)
(0.34447983023818896,AbsolMega Absol,Dark,,565,65,150,60,115,60,115)
(0.3438511422374575,Lopunny,Normal,,480,65,76,84,54,96,105)
(0.34151100809951407,Flygon,Ground,Dragon,520,80,100,80,80,80,100)
(0.33960294675244884,Primeape,Fighting,,455,65,105,60,60,70,95)
(0.33915411515472416,Skrelp,Poison,Water,320,50,60,60,60,60,30)
(0.3389445875373841,Sawk,Fighting,,465,75,125,75,30,75,85)
(0.33885985216942405,Kyogre,Water,,670,100,100,90,150,140,90)
(0.33779179247607916,Spiritomb,Ghost,Dark,485,50,92,108,92,108,35)
(0.3366882932971116,Jolteon,Electric,,525,65,65,60,110,95,130)
(0.3326033751668669,Servine,Grass,,413,60,60,75,60,75,83)
(0.3321675872621004,Sandslash,Ground,,450,75,100,110,45,55,65)
(0.33028620314556467,Ho-oh,Fire,Flying,680,106,130,90,110,154,90)
(0.32941705915710395,Flareon,Fire,,525,65,130,60,95,110,65)
(0.329381580913901,KangaskhanMega Kangaskhan,Normal,,590,105,125,100,60,100,100)
(0.32500656849382825,Pidgeot,Normal,Flying,479,83,80,75,70,70,101)
(0.3220157525398615,Vanillish,Ice,,395,51,65,65,80,75,59)
(0.3217176480198234,Muk,Poison,,500,105,105,75,65,100,50)
(0.32111191146934068,Pachirisu,Electric,,405,60,45,70,45,90,95)
(0.31902924685895273,Dusknoir,Ghost,,525,45,100,135,65,135,45)
(0.3171317393455201,Honedge,Steel,Ghost,325,45,80,100,35,37,28)
(0.3168367797545829,Turtwig,Grass,,318,55,68,64,45,55,31)
(0.3167196731505978,GourgeistAverage Size,Ghost,Grass,494,65,90,122,58,75,84)
(0.3149686589001369,Scyther,Bug,Flying,500,70,110,80,55,80,105)
(0.3143333241071532,Girafarig,Normal,Psychic,455,70,80,65,90,65,85)
(0.31416361047848895,WormadamPlant Cloak,Bug,Grass,424,60,59,85,79,105,36)
(0.31316164620237885,RotomHeat Rotom,Electric,Fire,520,50,65,107,105,107,86)
(0.31139053596479227,Mantine,Water,Flying,465,65,40,70,80,140,70)
(0.3101687697912171,Crawdaunt,Water,Dark,468,63,120,85,90,55,55)
(0.30983546356893976,Sableye,Dark,Ghost,380,50,75,75,65,65,50)
(0.30945739918822324,Eelektross,Electric,,515,85,115,80,105,80,50)
(0.30896829164396433,Noivern,Flying,Dragon,535,85,70,80,97,80,123)
(0.30361662259463396,Litleo,Fire,Normal,369,62,50,58,73,54,72)
(0.30025231948111153,Omanyte,Rock,Water,355,35,40,100,90,55,35)
(0.298567870676607193,LatiasMega Latias,Dragon,Psychic,700,80,100,120,140,150,110)
(0.296563188940019806,Gengar,Ghost,Poison,500,60,65,60,130,75,110)
(0.2921737202758332,Darkrai,Dark,,600,70,90,90,135,90,125)
(0.2916807140437149,Dwebble,Bug,Rock,325,50,65,85,35,35,55)
(0.29141118415834677,Glalie,Ice,,480,80,80,80,80,80,80)
(0.28749464307935146,Gogoat,Grass,,531,123,100,62,97,81,68)
(0.28387137167029863,Cloyster,Water,Ice,525,50,95,180,85,45,70)
(0.2836625368494695,Hawlucha,Fighting,Flying,500,78,92,75,74,63,118)
(0.2829486911634417,BlazikenMega Blaziken,Fire,Fighting,630,80,160,80,130,80,100)
(0.2806633157797974,Torkoal,Fire,,470,70,85,140,85,70,20)
(0.2795737661474579,Serperior,Grass,,528,75,75,95,75,95,113)
(0.2795424492413867,Tangrowth,Grass,,535,100,100,125,110,50,50)
(0.2792278170727174,LatiosMega Latios,Dragon,Psychic,700,80,130,100,160,120,110)
(0.27782500995144,Leafeon,Grass,,525,65,110,130,60,65,95)
(0.27615265714968384,SteelixMega Steelix,Steel,Ground,610,75,125,230,55,95,30)
(0.27475657383013696,Heatran,Fire,Steel,600,91,90,106,130,106,77)
(0.27410294870211063,Purugly,Normal,,452,71,82,64,64,59,112)
(0.27322020209182896,Kecleon,Normal,,440,60,90,70,60,120,40)
(0.27247822594028335,Froslass,Ice,Ghost,480,70,80,70,80,70,110)
(0.2707539617333551,Hydreigon,Dark,Dragon,600,92,105,90,125,90,98)
(0.26695393975506965,Fearow,Normal,Flying,442,65,90,65,61,61,100)
(0.2666574698671641,Cradily,Rock,Grass,495,86,81,97,81,107,43)
(0.26545454108967803,Rapidash,Fire,,500,65,100,70,80,80,105)
(0.26417886077170327,Octillery,Water,,480,75,105,75,105,75,45)
(0.2637452988060174,Nosepass,Rock,,375,30,45,135,45,90,30)
(0.2604980326816031,CameruptMega Camerupt,Fire,Ground,560,70,120,100,145,105,20)

(0.2604786668601531,Mamoswine,Ice,Ground,530,110,130,80,70,60,80)
(0.25993098781108515,Staraptor,Normal,Flying,485,85,120,70,50,60,100)
(0.2582139598597084,Dragonite,Dragon,Flying,600,91,134,95,100,100,80)
(0.2570094332165883,AlakazamMega Alakazam,Psychic,,590,55,50,65,175,95,150)
(0.2566996325635803,Vanilluxe,Ice,,535,71,95,85,110,95,79)
(0.25667046236686714,Empoleon,Water,Steel,530,84,86,88,111,101,60)
(0.25362111053717595,Clefable,Fairy,,483,95,70,73,95,90,60)
(0.24862068395885484,Spritzee,Fairy,,341,78,52,60,63,65,23)
(0.24861235384247093,Dialga,Steel,Dragon,680,100,120,120,150,100,90)
(0.23934046279050447,Shellder,Water,,305,30,65,100,45,25,40)
(0.2344451718530118,Gliscor,Ground,Flying,510,75,95,125,45,75,95)
(0.23416024071157277,Sandshrew,Ground,,300,50,75,85,20,30,40)
(0.2333953622243221,Quagsire,Water,Ground,430,95,85,85,65,65,35)
(0.232882406648658,Trevenant,Ghost,Grass,474,85,110,76,65,82,56)
(0.23158685129080803,Tranquill,Normal,Flying,358,62,77,62,50,42,65)
(0.22732059097213642,Magnezone,Electric,Steel,535,70,70,115,130,90,60)
(0.226617684023290185,Gloom,Grass,Poison,395,60,65,70,85,75,40)
(0.2255689740023438,Sawsbuck,Normal,Grass,475,80,100,70,60,70,95)
(0.221154535189024926,Swalot,Poison,,467,100,73,83,73,83,55)
(0.22049116373722433,GourgeistSuper Size,Ghost,Grass,494,85,100,122,58,75,54)
(0.2201225966841025,Pinsir,Bug,,500,65,125,100,55,70,85)
(0.2186569623954696,Aron,Steel,Rock,330,50,70,100,40,40,30)
(0.21852798665076867,Grotle,Grass,,405,75,89,85,55,65,36)
(0.21700171852624595,Cottonee,Grass,Fairy,280,40,27,60,37,50,66)
(0.2156707082517185,GourgeistLarge Size,Ghost,Grass,494,75,95,122,58,75,69)
(0.21427872293301842,Suicune,Water,,580,100,75,115,90,115,85)
(0.2124856112690039,Mew,Psychic,,600,100,100,100,100,100,100)
(0.2120768860684391,Goodra,Dragon,,600,90,100,70,110,150,80)
(0.2086347468848906,Salamence,Dragon,Flying,600,95,135,80,110,80,100)
(0.2072771757397569,Marshtomp,Water,Ground,405,70,85,70,60,70,50)
(0.2043446296894742,Misdreavus,Ghost,,435,60,60,60,85,85,85)
(0.20374526098231283,Carracosta,Water,Rock,495,74,108,133,83,65,32)
(0.20222732592658829,SharpedoMega Sharpedo,Water,Dark,560,70,140,70,110,65,105)
(0.2021446162248458,Stoutland,Normal,,500,85,110,90,45,90,80)
(0.2014423815296994,Dusclops,Ghost,,455,40,70,130,60,130,25)
(0.19775230175452307,TyranitarMega Tyranitar,Rock,Dark,700,100,164,150,95,120,71)
(0.1969876267373103,Electivire,Electric,,540,75,123,67,95,85,95)
(0.19469954622916974,Crustle,Bug,Rock,475,70,95,125,65,75,45)
(0.19392819405925021,Yanmega,Bug,Flying,515,86,76,86,116,56,95)
(0.19388399218897434,Kingdra,Water,Dragon,540,75,95,95,95,95,85)
(0.1938288924764454,MetagrossMega Metagross,Steel,Psychic,700,80,145,150,105,110,110)
(0.19174517642789668,Whiscash,Water,Ground,468,110,78,73,76,71,60)
(0.1901444216171594,Malamar,Dark,Psychic,482,86,92,88,68,75,73)
(0.18927312636838545,Samurott,Water,,528,95,100,85,108,70,70)
(0.18892509232349275,Sylveon,Fairy,,525,95,65,65,110,130,60)
(0.1851267288806696,RotomFrost Rotom,Electric,Ice,520,50,65,107,105,107,86)
(0.1832175732435113,Tirtouga,Water,Rock,355,54,78,103,53,45,22)
(0.17882304136991634,Spinda,Normal,,360,60,60,60,60,60,60)
(0.1688160326814142,Swablu,Normal,Flying,310,45,40,60,40,75,50)
(0.16855557493660822,Relicanth,Water,Rock,485,100,90,130,45,65,55)
(0.1674348774576605,Qwilfish,Water,Poison,430,65,95,75,55,55,85)
(0.1603362104585596,Clawitzer,Water,,500,71,73,88,120,89,59)
(0.15957340726265712,Swampert,Water,Ground,535,100,110,90,85,90,60)
(0.15926464212304992,Manectric,Electric,,475,70,75,60,105,60,105)
(0.1579181594203788,Tyranitar,Rock,Dark,600,100,134,110,95,100,61)
(0.1576739301465503,Barbaracle,Rock,Water,500,72,105,115,54,86,68)
(0.1550264641887147,Walrein,Ice,Water,530,110,80,90,95,90,65)
(0.1548117562072617,Slurpuff,Fairy,,480,82,80,86,85,75,72)
(0.1521485040049222,LandorusIncarnate Forme,Ground,Flying,600,89,125,90,115,80,101)
(0.14909298093100798,Exeggutor,Grass,Psychic,520,95,95,85,125,65,55)
(0.1434685413134149,GarchompMega Garchomp,Dragon,Ground,700,108,170,115,120,95,92)
(0.1355107048180022,GroudonPrimal Groudon,Ground,Fire,770,100,180,160,150,90,90)
(0.13540607854627873,Combusken,Fire,Fighting,405,60,85,60,85,60,55)
(0.1347890073957866,Altaria,Dragon,Flying,490,75,70,90,70,105,80)
(0.13391708939210978,Emboar,Fire,Fighting,528,110,123,65,100,65,65)
(0.131799950998908182,Electrode,Electric,,480,60,50,70,80,80,140)
(0.1315009545307461,Lucario,Fighting,Steel,525,70,110,70,115,70,90)
(0.1293156439113149,Leavanny,Bug,Grass,500,75,103,80,70,80,92)
(0.12910367123784539,Weezing,Poison,,490,65,90,120,85,70,60)
(0.1282555530127295,Ampharos,Electric,,510,90,75,85,115,90,55)
(0.1199983805261242,Eelektrik,Electric,,405,65,85,70,75,70,40)
(0.11944103488978941,MedichamMega Medicham,Fighting,Psychic,510,60,100,85,80,85,100)
(0.11397351667580058,Jirachi,Steel,Psychic,600,100,100,100,100,100,100)
(0.11374980675633217,Mr. Mime,Psychic,Fairy,460,40,45,65,100,120,90)
(0.11364772964723258,RotomFan Rotom,Electric,Flying,520,50,65,107,105,107,86)
(0.11182939464481967,Bibarel,Normal,Water,410,79,85,60,55,60,71)
(0.111134007326987905,Haxorus,Dragon,,540,76,147,90,60,70,97)
(0.111111305816770467,GlalieMega Glalie,Ice,,580,80,120,80,120,80,100)

(0.1094643031305591,LandorusTherian Forme,Ground,Flying,600,89,145,90,105,80,91)
(0.1087106612684331,Cubone,Ground,,320,50,50,95,40,50,35)
(0.1041433195310163,Ferroseed,Grass,Steel,305,44,50,91,24,86,10)
(0.10193201030414079,Audino,Normal,,445,103,60,86,60,86,50)
(0.10058795970803058,Meganium,Grass,,525,80,82,100,83,100,80)
(0.09834351651061335,PinsirMega Pinsir,Bug,Flying,600,65,155,120,65,90,105)
(0.09792062776900323,Skuntank,Poison,Dark,479,103,93,67,71,61,84)
(0.09759391013615681,Infernape,Fire,Fighting,534,76,104,71,104,71,108)
(0.09684072521582421,Magmar,Fire,,495,65,95,57,100,85,93)
(0.09392737803555673,Seviper,Poison,,458,73,100,60,100,60,65)
(0.09374047838242039,AggronMega Aggron,Steel,,630,70,140,230,60,80,50)
(0.09153606796621461,Garchomp,Dragon,Ground,600,108,130,95,80,85,102)
(0.09100753785494553,Parasect,Bug,Grass,405,60,95,80,60,80,30)
(0.09022174349139389,KeldeoResolute Forme,Water,Fighting,580,91,72,90,129,90,108)
(0.08892708303526664,Vaporeon,Water,,525,130,65,60,110,95,65)
(0.08845364442557835,AerodactylMega Aerodactyl,Rock,Flying,615,80,135,85,70,95,150)
(0.08721895699012283,Milotic,Water,,540,95,60,79,100,125,81)
(0.0871468273325745,Lickitung,Normal,,385,90,55,75,60,75,30)
(0.08588310955374145,Yamask,Ghost,,303,38,30,85,55,65,30)
(0.0829951282334076,Galvantula,Bug,Electric,472,70,77,60,97,60,108)
(0.08244180790262778,GengarMega Gengar,Ghost,Poison,600,60,65,80,170,95,130)
(0.08002142278337654,MeloettaAria Forme,Normal,Psychic,600,100,77,77,128,128,90)
(0.07753503061023637,Whirlipede,Bug,Poison,360,40,55,99,40,79,47)
(0.0772897053455378,Reuniclus,Psychic,,490,110,65,75,125,85,30)
(0.07472744730031222,Grumpig,Psychic,,470,80,45,65,90,110,80)
(0.0720982938315129,Solrock,Rock,Psychic,440,70,95,85,55,65,70)
(0.07207213794453127,Musharna,Psychic,,487,116,55,85,107,95,29)
(0.07188815092921264,Azelf,Psychic,,580,75,125,70,125,70,115)
(0.07056998057593955,Hypno,Psychic,,483,85,73,70,73,115,67)
(0.06466202032627877,Nincada,Bug,Ground,266,31,45,90,30,30,40)
(0.06352651436839174,TornadusIncarnate Forme,Flying,,580,79,115,70,125,80,111)
(0.06163766840821527,Tangela,Grass,,435,65,55,115,100,40,60)
(0.0607116838853136,Hippowdon,Ground,,525,108,112,118,68,72,47)
(0.05913959434253424,Shuckle,Bug,Rock,505,20,10,230,10,230,5)
(0.05803539091557797,Lilligant,Grass,,480,70,60,75,110,75,90)
(0.051312286445276856,Wobbuffet,Psychic,,405,190,33,58,33,58,33)
(0.05013051965967019,Lumineon,Water,,460,69,69,76,69,86,91)
(0.0480897129258124,Snorlax,Normal,,540,160,110,65,65,110,30)
(0.04782248814654089,TornadusTherian Forme,Flying,,580,79,100,80,110,90,121)
(0.047277640374814744,Latios,Dragon,Psychic,600,80,90,80,130,110,110)
(0.04506722985743439,Kingler,Water,,475,55,130,115,50,50,75)
(0.04495191493526396,Stunfisk,Ground,Electric,471,109,66,84,81,99,32)
(0.04425352842884489,Cherrim,Grass,,450,70,60,70,87,78,85)
(0.04158701153014699,Hippopotas,Ground,,330,68,72,78,38,42,32)
(0.0388511759848519,SableyeMega Sableye,Dark,Ghost,480,50,85,125,85,115,20)
(0.0383118312105285,Bagon,Dragon,,300,45,75,60,40,30,50)
(0.0353956485878244,Togekiss,Fairy,Flying,545,85,50,95,120,115,80)
(0.03443910836251205,Heracross,Bug,Fighting,500,80,125,75,40,95,85)
(0.034096493207332323,Nidorino,Poison,,365,61,72,57,55,55,65)
(0.03400207912275799,RayquazaMega Rayquaza,Dragon,Flying,780,105,180,100,180,100,115)
(0.02979580613110655,ThundurusTherian Forme,Electric,Flying,580,79,105,70,145,80,101)
(0.028885724580670846,Klang,Steel,,440,60,80,95,70,85,50)
(0.028736731995026243,Charmeleon,Fire,,405,58,64,58,80,65,80)
(0.028242204898577317,Volcanion,Fire,Water,600,80,110,120,130,90,70)
(0.024829835588728533,Shelgon,Dragon,,420,65,95,100,60,50,50)
(0.021374426859410933,Quilladin,Grass,,405,61,78,95,56,58,57)
(0.02078670169108665,Vullaby,Dark,Flying,370,70,55,75,45,65,60)
(0.01655018646543227,Uxie,Psychic,,580,75,75,130,75,130,95)
(0.014968890227466503,Aromatisse,Fairy,,462,101,72,72,99,89,29)
(0.012003695139213844,ThundurusIncarnate Forme,Electric,Flying,580,79,115,70,125,80,111)
(0.009613408852814365,MewtwoMega Mewtwo Y,Psychic,,780,106,150,70,194,120,140)
(0.007342933234048554,Quilava,Fire,,405,58,64,58,80,65,80)
(0.0070262513462178156,HeracrossMega Heracross,Bug,Fighting,600,80,185,115,40,105,75)
(0.0028558780119676275,Camerupt,Fire,Ground,460,70,100,70,105,75,40)
(2.5987695652329723E-4,Sewaddle,Bug,Grass,310,45,53,70,40,60,42)

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

Commands

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

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

Results:-

```
2017-12-05 14:25:35,900 [main] INFO  org.apache.pig.backend.hadoop.executionengine.util.MapRedUtil - Total input paths to process : 1
(0.9971168104644487,Spritzee,Fairy,,341,78,52,60,63,65,23)
(0.9970199418734202,Bellossom,Grass,,490,75,80,95,90,100,50)
(0.9909488548185004,TornadusIncarnate Forme,Flying,,580,79,115,70,125,80,111)
(0.9866250553382035,Bagon,Dragon,,300,45,75,60,40,30,50)
(0.9854200998620459,Raticate,Normal,,413,55,81,60,50,70,97)
grunt>
```

(0.9971168104644487,Spritzee,Fairy,,341,78,52,60,63,65,23)
(0.9970199418734202,Bellossom,Grass,,490,75,80,95,90,100,50)
(0.9909488548185004,TornadusIncarnate Forme,Flying,,580,79,115,70,125,80,111)
(0.9866250553382035,Bagon,Dragon,,300,45,75,60,40,30,50)
(0.9854200998620459,Raticate,Normal,,413,55,81,60,50,70,97)

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

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

Results:-

```
2017-12-05 14:30:16,055 [main] INFO  org.apache.pig.backend.hadoop.executionengine.util.MapRedUtil - Total input paths to process : 1
(0.9989361731546802,AegislashShield Forme,Steel,Ghost,520,60,50,150,50,150,60)
(0.9966283730449068,ShayminSky Forme,Grass,Flying,600,100,103,75,120,75,127)
(0.9964138291095315,Reuniclus,Psychic,,490,110,65,75,125,85,30)
(0.9961975430711998,Swellow,Normal,Flying,430,60,85,60,50,50,125)
(0.9950529018444105,Golbat,Poison,Flying,455,75,80,70,65,75,90)
grunt>
```

(0.9989361731546802,AegislashShield Forme,Steel,Ghost,520,60,50,150,50,150,60)
(0.9966283730449068,ShayminSky Forme,Grass,Flying,600,100,103,75,120,75,127)
(0.9964138291095315,Reuniclus,Psychic,,490,110,65,75,125,85,30)
(0.9961975430711998,Swellow,Normal,Flying,430,60,85,60,50,50,125)
(0.9950529018444105,Golbat,Poison,Flying,455,75,80,70,65,75,90)

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).

Commands

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

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

Result:-

```
2017-12-05 14:35:47,746 [main]
((PumpkabooLarge Size,54))
((PinsirMega Pinsir,65))
((Aurorus,123))
((Golem,80))
((Moltres,90))
grunt>
```

((PumpkabooLarge Size,54))
((PinsirMega Pinsir,65))
((Aurorus,123))
((Golem,80))
((Moltres,90))

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

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

Result:-

```
2017-12-05 14:41:17,546 [main] INFO
((Bonsly,50))
((Abomasnow,90))
((Gardevoir,68))
((AlakazamMega Alakazam,55))
((Klink,40))
grunt>
grunt>
grunt>
grunt>
```

((Bonsly,50))
((Abomasnow,90))
((Gardevoir,68))

((AlakazamMega Alakazam,55))
((Klink,40))

Therefore querying is over using some simple pre-defined functions to get 2 sets of 5 Pokémons, which get select randomly.

In conclusion, let's store this result in our HDFS system
grunt> STORE limit_data_random1_desending INTO '/u01/hadoop/Pig/Pokemon_usecase/player1';

```
grunt> fs -ls /u01/hadoop/Pig/Pokemon_usecase/player1;
Found 2 items
-rw-r--r--   1 sahil supergroup          0 2017-12-05 14:57 /u01/hadoop/Pig/Pokemon_usecase/player1/_SUCCESS
-rw-r--r--   1 sahil supergroup        338 2017-12-05 14:57 /u01/hadoop/Pig/Pokemon_usecase/player1/part-r-00000
grunt> fs -cat /u01/hadoop/Pig/Pokemon_usecase/player1/part-r-00000;
0.9980391785014633     RotomMow Rotom  Electric         Grass   520     50      65      107     105     107     86
0.9919326922165718     Togetic Fairy   Flying  405      55      40      85      80      105     40
0.9905834806097458     PidgeotMega Pidgeot     Normal  Flying  579      83      80      80      135     80      121
0.9903254392596353     Fearow  Normal  Flying  442      65      90      65      61      61      100
0.9870953014290612     Xatu    Psychic Flying  470      65      75      70      95      70      95
grunt>
```

grunt> STORE limit_data_random2_desending INTO '/u01/hadoop/Pig/Pokemon_usecase/player2';

```
grunt> fs -ls /u01/hadoop/Pig/Pokemon_usecase/player2;
Found 2 items
-rw-r--r--   1 sahil supergroup          0 2017-12-05 15:08 /u01/hadoop/Pig/Pokemon_usecase/player2/_SUCCESS
-rw-r--r--   1 sahil supergroup        297 2017-12-05 15:08 /u01/hadoop/Pig/Pokemon_usecase/player2/part-r-00000
grunt>
grunt> fs -cat /u01/hadoop/Pig/Pokemon_usecase/player2/part-r-00000;
0.999920013800653      Porygon Normal           395     65      60      70      85      75      40
0.9994873718274164     Dwebble Bug     Rock     325     50      65      85      35      35      55
0.9982556342340048     Combusken       Fire     Fighting        405     60      85      60      85      60      55
0.9965042759913312     Sableye Dark    Ghost   380      50      75      75      65      65      50
0.9942847326828901     Nidorina        Poison           365     70      62      67      55      55      56
grunt>
```