

Assignment 2

Example Test Cases

Last updated: **Friday 31st March 2:34pm**

Most recent changes are shown in **red** ... older changes are shown in **brown**.

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Introduction

This document contains examples of output from the various scripts that you are required to develop.

Possible Evolutions Example

Note that each level of indentation is represented by a single tab character.
The evolution requirements emulate a (sideways) tree structure.
(when autotesting and marking, the autotester will ignore the indentation and alignment of the output)

Note that a `OR` will never appear under an `AND`.
That is to say, the following is not possible:

```

    Level: 14
  OR
    NOT Region: Hisui
AND
    Level: 17
  OR
    Region: Hisui
```

There will also never be more than one layer of `AND`s, and one layer of `OR`s.
That is to say, the following is not possible:

```

    Level: 14
  OR
    NOT Region: Hisui
OR
    Level: 17
  OR
    Region: Hisui
```

following are a selection of example outputs from the `possible_evolution`s script.

```
$ ./possible_evolution Dreepy

'Dreepy' doesn't have any pre-evolutions.

'Dreepy' can evolve into:
  'Drakloak' when the following requirements are satisfied:
    Level: 50
```

```
$ ./possible_evolution Monferno
```

```
'Monferno' can evolve from:
```

```
  'Chimchar' when the following requirements are satisfied:  
    Level: 14
```

```
'Monferno' can evolve into:
```

```
  'Infernape' when the following requirements are satisfied:  
    Level: 36
```

```
$ ./possible_evolution Quilava
```

```
'Quilava' can evolve from:
```

```
  'Cyndaquil' when the following requirements are satisfied:  
    Level: 14
```

```
    AND
```

```
    NOT Region: Hisui
```

```
  OR
```

```
    Level: 17
```

```
    AND
```

```
    Region: Hisui
```

```
'Quilava' can evolve into:
```

```
  'Typhlosion' when the following requirements are satisfied:  
    Level: 36
```

```
    AND
```

```
    NOT Region: Hisui
```

```
  'Hisuian Typhlosion' when the following requirements are satisfied:
```

```
    Level: 36
```

```
    AND
```

```
    Region: Hisui
```

```
$ ./possible_evolution Eevee
```

```
'Eevee' doesn't have any pre-evolutions.
```

```
'Eevee' can evolve into:
```

```
  'Vaporeon' when the following requirements are satisfied:  
    Use Item: Water Stone
```

```
  'Jolteon' when the following requirements are satisfied:
```

```
    Use Item: Thunder Stone
```

```
  'Flareon' when the following requirements are satisfied:
```

```
    Use Item: Fire Stone
```

```
  'Espeon' when the following requirements are satisfied:
```

```
    High Friendship
```

```
    AND
```

```
    Time of Day: Day
```

```
  'Umbreon' when the following requirements are satisfied:
```

```
    High Friendship
```

```
    AND
```

```

        Time of Day: Night

'Leafeon' when the following requirements are satisfied:
    Use Item: Leaf Stone
    OR
    Area: Mossy Rock

'Glaceon' when the following requirements are satisfied:
    Use Item: Ice Stone
    OR
    Area: Icy Rock

'Sylveon' when the following requirements are satisfied:
    High Friendship
    AND
    Know Move Type: Fairy

$ ./possible_evolution Nincada

'Nincada' doesn't have any pre-evolutions.

'Nincada' can evolve into:
    'Ninjask' when the following requirements are satisfied:
        Level: 20

    'Shedinja' when the following requirements are satisfied:
        Level: 20
        AND
        Pokemon in Party: Empty
        AND
        Has Pokeballs

$ ./possible_evolution Ursaluna

'Ursaluna' can evolve from:
    'Ursaring' when the following requirements are satisfied:
        Time of Day: Night
        AND
        Moon Phase: Full Moon
        AND
        Region: Hisui
        AND
        Use Item: Peat Block

'Ursaluna' doesn't have any post-evolutions.

$ ./possible_evolution Porygon2

'Porygon2' can evolve from:
    'Porygon' when the following requirements are satisfied:
        Trade
        AND
        Hold Item: Upgrade

'Porygon2' can evolve into:
```

```
'Porygon-Z' when the following requirements are satisfied:
    Trade
    AND
    Hold Item: Dubious Disc

$ ./possible_evolutions 'Basculin - White-Striped Form'

'Basculin - White-Striped Form' doesn't have any pre-evolutions.

'Basculin - White-Striped Form' can evolve into:
    'Basculegion - Male' when the following requirements are satisfied:
        Gender: Male
        AND
        Recoil Damage: 294

    'Basculegion - Female' when the following requirements are satisfied:
        Gender: Female
        AND
        Recoil Damage: 294
```

following are a selection of error conditions and their corresponding error messages that your script be able to handle:

```
$ ./possible_evolutions Fluffluff

'Fluffluff' isn't a Pokemon that exists.
```

Pokemon Density Example

following are a selection of example outputs from the `pokemon_density` script.

All decimal values are kept unrounded for the entire duration of the calculation.
And finally rounded to 4 decimal places for output.

Note that the output is sorted by density.
Unless the location has no Pokemon, in which case it is sorted by name.

```
$ ./pokemon_density Kanto

The average density of Pokemon within each location in the 'Kanto' region:

    Mt. Ember:      0.7893
    Sevault Canyon: 0.4107
    Mt. Moon:       0.3953
    Seafoam Islands: 0.3657
    Icefall Cave:   0.3556
    Kindle Road:    0.3191
    Cerulean Cave:  0.2819
    Rock Tunnel:    0.2759
    Safari Zone:    0.2742
    Route 22:       0.2460
    Ruin Valley:    0.2432
    Route 21:       0.2370
    Route 11:       0.2296
    Route 10:       0.2204
    Route 6:        0.2159
```

Route 12:	0.2087
Route 13:	0.2052
Route 4:	0.1988
Route 24:	0.1958
Route 23:	0.1923
Route 20:	0.1845
Route 2:	0.1801
Route 18:	0.1761
Route 25:	0.1757
Route 19:	0.1731
Treasure Beach:	0.1694
Five Island:	0.1624
One Island:	0.1594
Five Isle Meadow:	0.1590
Water Path:	0.1587
Bond Bridge:	0.1576
Power Plant:	0.1517
Tanoby Ruins:	0.1501
Route 17:	0.1471
Victory Road:	0.1442
Memorial Pillar:	0.1408
Pokémon Mansion:	0.1394
Resort Gorgeous:	0.1378
Water Labyrinth:	0.1378
Vermilion City:	0.1372
Route 9:	0.1359
Route 3:	0.1355
Trainer Tower:	0.1348
Outcast Island:	0.1348
Green Path:	0.1348
Cinnabar Island:	0.1313
Four Island:	0.1273
Route 5:	0.1214
Route 1:	0.1204
Pallet Town:	0.1182
Route 16:	0.1142
Route 7:	0.1108
Cerulean City:	0.1105
Route 8:	0.1074
Cape Brink:	0.1055
Berry Forest:	0.1041
Viridian Forest:	0.0955
Fuchsia City:	0.0953
Pewter City:	0.0926
Lavender Town:	0.0926
Viridian City:	0.0876
Diglett's Cave:	0.0786
Route 14:	0.0705
Route 15:	0.0661
Celadon City:	0.0549
Canyon Entrance:	0.0467
Pattern Bush:	0.0432
Pokémon Tower:	0.0165
Lost Cave:	0.0051
Three Isle Port:	0.0016

Roaming Kanto: 0.0000

The following locations in the 'Kanto' region have no wild Pokemon encounters:

Dotted Hole
Indigo Plateau
Navel Rock
Rocket Hideout
Rocket Warehouse
Route 26
Route 27
Route 28
SS Anne
Saffron City
Seven Island
Silph Co.
Six Island
Three Island
Three Isle Path
Tohjo Falls
Two Island
Underground Path 5-6
Underground Path 7-8

\$./pokemon_density Galar

The average density of Pokemon within each location in the 'Galar' region:

Giant's Cap: 8.4165
Stony Wilderness: 6.2758
Snowslide Slope: 5.9417
South Lake Miloch: 5.7355
North Lake Miloch: 5.3855
West Lake Axewell: 4.9628
Rolling Fields: 4.6979
Bridge Field: 4.5472
Ballimere Lake: 4.5200
Giant's Mirror: 4.4843
East Lake Axewell: 4.4634
Loop Lagoon: 3.9095
Giant's Seat: 3.4472
Three-Point Pass: 3.4203
Frigid Sea: 3.3557
Giant's Bed: 3.0825
Giant's Foot: 3.0704
Old Cemetery: 2.9589
Motostoke Riverbank: 2.9341
Dappled Grove: 2.8613
Slippery Slope: 2.7300
Challenge Beach: 2.6085
Lake of Outrage: 2.5923
Courageous Cavern: 2.5062
Fields of Honor: 2.1428
Hammerlocke Hills: 2.1057
Dusty Bowl: 1.9267

Soothing Wetlands:	1.9152
Challenge Road:	1.9104
Frostpoint Field:	1.8560
Workout Sea:	1.8496
Axew's Eye:	1.8461
Forest of Focus:	1.8182
Training Lowlands:	1.7634
Route 3:	1.6546
Watchtower Ruins:	1.6514
Honeycalm Island:	1.6382
Stepping-Stone Sea:	1.6101
Route 2:	1.5292
Insular Sea:	1.2348
Lakeside Cave:	0.9517
Galar Mine:	0.9459
Route 9:	0.9301
Route 4:	0.9170
Slumbering Weald:	0.8449
Galar Mine No. 2:	0.8210
Honeycalm Sea:	0.7811
Roaring-Sea Caves:	0.7486
Route 5:	0.6928
Route 6:	0.6064
Potbottom Desert:	0.5797
Route 8:	0.5494
Brawlers' Cave:	0.4643
Route 10:	0.4630
Route 7:	0.4526
Route 1:	0.4214
Warm-Up Tunnel:	0.3703
Path to the Peak:	0.3635
Motostoke Outskirts:	0.3357
Tunnel to the Top:	0.3095
Motostoke:	0.2593
Glimwood Tangle:	0.2275
Hulbury:	0.1415

The following locations in the 'Galar' region have no wild Pokemon encounters:

- Ballonlea
- Battle Tower
- Circhester
- Crown Shrine
- Dyna Tree Hill
- Freezington
- Hammerlocke
- Iceberg Ruins
- Iron Ruins
- Master Dojo
- Max Lair
- Postwick
- Rock Peak Ruins
- Spikemuth
- Split-Decision Ruins
- Steamdrift Way

Stow-on-Side
Tower of Darkness
Tower of Waters
Turffield
Wedgehurst
Wyndon

\$./pokemon_density Sinnoh

The average density of Pokemon within each location in the 'Sinnoh' region:

Spacious Cave:	1.2393
Sunlit Cavern:	1.2304
Mt. Coronet:	1.1388
Still-Water Cavern:	1.1356
Riverbank Cave:	1.1356
Grassland Cave:	1.0866
Rocky Cave:	0.9427
Ruin Maniac Tunnel:	0.8617
Big Bluff Cavern:	0.7989
Whiteout Cave:	0.7948
Fountainspring Cave:	0.7495
Icy Cave:	0.7099
Glacial Cavern:	0.7033
Route 205:	0.7017
Route 212:	0.6601
Wayward Cave:	0.6375
Great Marsh:	0.6196
Route 204:	0.5927
Dazzling Cave:	0.5900
Stargleam Cavern:	0.5900
Fuego Ironworks:	0.5714
Iron Island:	0.5554
Route 207:	0.5161
Route 213:	0.5045
Route 210:	0.4876
Oreburgh Mine:	0.4854
Bogsunk Cavern:	0.4840
Swampy Cave:	0.4840
Valley Windworks:	0.4825
Route 206:	0.4764
Route 228:	0.4683
Typhlo Cavern:	0.4206
Route 214:	0.4059
Oreburgh Gate:	0.4051
Route 218:	0.3916
Stark Mountain:	0.3853
Route 221:	0.3847
Route 211:	0.3801
Route 202:	0.3798
Route 203:	0.3594
Route 215:	0.3569
Lake Verity:	0.3566
Volcanic Cave:	0.3375
Route 209:	0.3314

Eterna Forest:	0.3308
Sandsear Cave:	0.3185
Route 222:	0.3073
Route 224:	0.2977
Route 227:	0.2977
Route 208:	0.2797
Route 201:	0.2705
Route 226:	0.2635
Victory Road:	0.2334
Lake Acuity:	0.2269
Turnback Cave:	0.2168
Route 225:	0.2049
Lake Valor:	0.1982
Route 219:	0.1876
Route 220:	0.1824
Trophy Garden:	0.1772
Canalave City:	0.1678
Route 229:	0.1623
Ravaged Path:	0.1596
Route 230:	0.1596
Sendoff Spring:	0.1556
Pastoria City:	0.1503
Valor Lakefront:	0.1346
Route 217:	0.1233
Floaroma Meadow:	0.1209
Snowpoint Temple:	0.1076
Celestic Town:	0.1063
Twinleaf Town:	0.1047
Sunyshore City:	0.1043
Route 216:	0.0957
Pokémon League:	0.0940
Eterna City:	0.0922
Route 223:	0.0881
Acuity Lakefront:	0.0782
Resort Area:	0.0780
Lost Tower:	0.0772
Solaceon Ruins:	0.0397
Old Chateau:	0.0002
Roaming Sinnoh:	0.0000

The following locations in the 'Sinnoh' region have no wild Pokemon encounters:

- Amity Square
- Battle Frontier
- Battle Park
- Distortion World
- Eterna Galactic Building
- Fight Area
- Floaroma Town
- Flower Paradise
- Fullmoon Island
- Galactic Warehouse
- Grand Lake Hotel
- Grand Underground
- Hall of Origin

```
Hearthome City
Jubilife City
Newmoon Island
Oreburgh City
Pal Park
Pokémon Mansion
Ramanas Park
Sandgem Town
Seabreak Path
Snowpoint City
Solaceon Town
Spear Pillar
Survival Area
Veilstone City
Veilstone Galactic Building
Verity Lakefront
```

following are a selection of error conditions and their corresponding error messages that your script be able to handle:

```
$ ./pokemon_density Aurorania

'Aurorania' isn't a region in the Pokemon series.
```

Attack Damage Example

following are a selection of example outputs from the `attack_damage` script.

Note that each row of output (except the first (and blank lines)) is indented with a single tab character.
The move names are left-aligned, and the damage values are right-aligned.
(when autotesting and marking, the autotester will ignore the indentation and alignment of the output)

```
$ ./attack_damage Bulbasaur Squirtle 'Fire Red'

In 'Pokemon Fire Red', When 'Bulbasaur' attacks 'Squirtle', 'Bulbasaur' can use the following moves:

    'Cut'           for a minimum of 1 damage and a maximum of 2 damage to 'Squirtle'.
    'Rock Smash'    for a minimum of 1 damage and a maximum of 2 damage to 'Squirtle'.
    'Secret Power'  for a minimum of 1 damage and a maximum of 2 damage to 'Squirtle'.
    'Double-Edge'   for a minimum of 1 damage and a maximum of 2 damage to 'Squirtle'.
    'Facade'        for a minimum of 1 damage and a maximum of 2 damage to 'Squirtle'.
    'Body Slam'     for a minimum of 1 damage and a maximum of 2 damage to 'Squirtle'.
    'Tackle'        for a minimum of 1 damage and a maximum of 2 damage to 'Squirtle'.
    'Strength'      for a minimum of 1 damage and a maximum of 2 damage to 'Squirtle'.
    'Skull Bash'    for a minimum of 1 damage and a maximum of 2 damage to 'Squirtle'.
    'Vine Whip'     for a minimum of 5 damage and a maximum of 6 damage to 'Squirtle'.
    'Bullet Seed'   for a minimum of 5 damage and a maximum of 6 damage to 'Squirtle'.
    'Razor Leaf'    for a minimum of 5 damage and a maximum of 6 damage to 'Squirtle'.
    'Hidden Power'  for a minimum of 4 damage and a maximum of 52 damage to 'Squirtle'.
    'Sludge Bomb'   for a minimum of 8 damage and a maximum of 116 damage to 'Squirtle'.
    'Magical Leaf'  for a minimum of 12 damage and a maximum of 157 damage to 'Squirtle'.
    'Giga Drain'    for a minimum of 14 damage and a maximum of 195 damage to 'Squirtle'.
    'Petal Dance'   for a minimum of 19 damage and a maximum of 308 damage to 'Squirtle'.
    'Solar Beam'    for a minimum of 19 damage and a maximum of 308 damage to 'Squirtle'.

$ ./attack_damage Pikachu Tentacruel 'Yellow'
```

In 'Pokemon Yellow', When 'Pikachu' attacks 'Tentacruel', 'Pikachu' can use the following moves:

'Submission'	for a minimum of 0 damage and a maximum of 1 damage to 'Tentacruel'.
'Double-Edge'	for a minimum of 1 damage and a maximum of 2 damage to 'Tentacruel'.
'Mega Kick'	for a minimum of 1 damage and a maximum of 2 damage to 'Tentacruel'.
'Mega Punch'	for a minimum of 1 damage and a maximum of 2 damage to 'Tentacruel'.
'Pay Day'	for a minimum of 1 damage and a maximum of 2 damage to 'Tentacruel'.
'Quick Attack'	for a minimum of 1 damage and a maximum of 2 damage to 'Tentacruel'.
'Rage'	for a minimum of 1 damage and a maximum of 2 damage to 'Tentacruel'.
'Skull Bash'	for a minimum of 1 damage and a maximum of 2 damage to 'Tentacruel'.
'Slam'	for a minimum of 1 damage and a maximum of 2 damage to 'Tentacruel'.
'Swift'	for a minimum of 1 damage and a maximum of 2 damage to 'Tentacruel'.
'Take Down'	for a minimum of 1 damage and a maximum of 2 damage to 'Tentacruel'.
'Body Slam'	for a minimum of 1 damage and a maximum of 2 damage to 'Tentacruel'.
'Thunder'	for a minimum of 5 damage and a maximum of 6 damage to 'Tentacruel'.
'Thunder Shock'	for a minimum of 5 damage and a maximum of 6 damage to 'Tentacruel'.
'Thunderbolt'	for a minimum of 5 damage and a maximum of 6 damage to 'Tentacruel'.

\$./attack_damage Pikachu Klinklang 'Shield'

In 'Pokemon Shield', When 'Pikachu' attacks 'Klinklang', 'Pikachu' can use the following moves:

'Body Slam'	for a minimum of 0 damage and a maximum of 1 damage to 'Klinklang'.
'Draining Kiss'	for a minimum of 0 damage and a maximum of 1 damage to 'Klinklang'.
'Facade'	for a minimum of 0 damage and a maximum of 1 damage to 'Klinklang'.
'Fake Out'	for a minimum of 0 damage and a maximum of 1 damage to 'Klinklang'.
'Feint'	for a minimum of 0 damage and a maximum of 1 damage to 'Klinklang'.
'Iron Tail'	for a minimum of 0 damage and a maximum of 1 damage to 'Klinklang'.
'Mega Kick'	for a minimum of 0 damage and a maximum of 1 damage to 'Klinklang'.
'Mega Punch'	for a minimum of 0 damage and a maximum of 1 damage to 'Klinklang'.
'Pay Day'	for a minimum of 0 damage and a maximum of 1 damage to 'Klinklang'.
'Play Rough'	for a minimum of 0 damage and a maximum of 1 damage to 'Klinklang'.
'Quick Attack'	for a minimum of 0 damage and a maximum of 1 damage to 'Klinklang'.
'Round'	for a minimum of 0 damage and a maximum of 1 damage to 'Klinklang'.
'Slam'	for a minimum of 0 damage and a maximum of 1 damage to 'Klinklang'.
'Snore'	for a minimum of 0 damage and a maximum of 1 damage to 'Klinklang'.
'Swift'	for a minimum of 0 damage and a maximum of 1 damage to 'Klinklang'.
'Uproar'	for a minimum of 0 damage and a maximum of 1 damage to 'Klinklang'.
'Disarming Voice'	for a minimum of 0 damage and a maximum of 1 damage to 'Klinklang'.
'Thief'	for a minimum of 1 damage and a maximum of 2 damage to 'Klinklang'.
'Surf'	for a minimum of 1 damage and a maximum of 2 damage to 'Klinklang'.
'Discharge'	for a minimum of 2 damage and a maximum of 3 damage to 'Klinklang'.
'Rising Voltage'	for a minimum of 2 damage and a maximum of 3 damage to 'Klinklang'.
'Electroweb'	for a minimum of 2 damage and a maximum of 3 damage to 'Klinklang'.
'Thunder Shock'	for a minimum of 2 damage and a maximum of 3 damage to 'Klinklang'.
'Thunderbolt'	for a minimum of 2 damage and a maximum of 3 damage to 'Klinklang'.
'Wild Charge'	for a minimum of 2 damage and a maximum of 3 damage to 'Klinklang'.
'Spark'	for a minimum of 2 damage and a maximum of 3 damage to 'Klinklang'.
'Volt Switch'	for a minimum of 2 damage and a maximum of 3 damage to 'Klinklang'.
'Nuzzle'	for a minimum of 2 damage and a maximum of 3 damage to 'Klinklang'.
'Thunder'	for a minimum of 2 damage and a maximum of 3 damage to 'Klinklang'.
'Thunder Punch'	for a minimum of 2 damage and a maximum of 3 damage to 'Klinklang'.
'Dig'	for a minimum of 3 damage and a maximum of 4 damage to 'Klinklang'.
'Brick Break'	for a minimum of 3 damage and a maximum of 4 damage to 'Klinklang'.

```
$ ./attack_damage Palkia Overqwil 'Legends: Arceus'
```

In 'Pokemon Legends: Arceus', When 'Palkia' attacks 'Overqwil', 'Palkia' can use the following moves:

'Shadow Claw'	for a minimum of	2 damage and a maximum of	30 damage to 'Overqwil'.
'Rock Smash'	for a minimum of	3 damage and a maximum of	35 damage to 'Overqwil'.
'Aerial Ace'	for a minimum of	4 damage and a maximum of	52 damage to 'Overqwil'.
'Slash'	for a minimum of	4 damage and a maximum of	60 damage to 'Overqwil'.
'Rock Slide'	for a minimum of	4 damage and a maximum of	65 damage to 'Overqwil'.
'Stone Edge'	for a minimum of	5 damage and a maximum of	86 damage to 'Overqwil'.
'Ancient Power'	for a minimum of	6 damage and a maximum of	102 damage to 'Overqwil'.
'Swift'	for a minimum of	6 damage and a maximum of	102 damage to 'Overqwil'.
'Dragon Claw'	for a minimum of	7 damage and a maximum of	103 damage to 'Overqwil'.
'Twister'	for a minimum of	7 damage and a maximum of	103 damage to 'Overqwil'.
'Bulldoze'	for a minimum of	8 damage and a maximum of	104 damage to 'Overqwil'.
'Aqua Tail'	for a minimum of	8 damage and a maximum of	116 damage to 'Overqwil'.
'Giga Impact'	for a minimum of	7 damage and a maximum of	128 damage to 'Overqwil'.
'Power Gem'	for a minimum of	8 damage and a maximum of	136 damage to 'Overqwil'.
'Ice Beam'	for a minimum of	9 damage and a maximum of	153 damage to 'Overqwil'.
'Flamethrower'	for a minimum of	9 damage and a maximum of	153 damage to 'Overqwil'.
'Thunderbolt'	for a minimum of	9 damage and a maximum of	153 damage to 'Overqwil'.
'Water Pulse'	for a minimum of	9 damage and a maximum of	154 damage to 'Overqwil'.
'Outrage'	for a minimum of	9 damage and a maximum of	154 damage to 'Overqwil'.
'Dragon Pulse'	for a minimum of	12 damage and a maximum of	217 damage to 'Overqwil'.
'Hyper Beam'	for a minimum of	13 damage and a maximum of	254 damage to 'Overqwil'.
'Spacial Rend'	for a minimum of	14 damage and a maximum of	255 damage to 'Overqwil'.
'Hydro Pump'	for a minimum of	16 damage and a maximum of	280 damage to 'Overqwil'.
'Earth Power'	for a minimum of	18 damage and a maximum of	306 damage to 'Overqwil'.
'Draco Meteor'	for a minimum of	18 damage and a maximum of	330 damage to 'Overqwil'.

```
$ ./attack_damage Dragapult Riolu 'Violet'
```

In 'Pokemon Violet', When 'Dragapult' attacks 'Riolu', 'Dragapult' can use the following moves:

'Infestation'	for a minimum of	1 damage and a maximum of	17 damage to 'Riolu'.
'Pounce'	for a minimum of	3 damage and a maximum of	64 damage to 'Riolu'.
'Thief'	for a minimum of	4 damage and a maximum of	76 damage to 'Riolu'.
'Assurance'	for a minimum of	4 damage and a maximum of	76 damage to 'Riolu'.
'Bite'	for a minimum of	4 damage and a maximum of	76 damage to 'Riolu'.
'Sucker Punch'	for a minimum of	5 damage and a maximum of	89 damage to 'Riolu'.
'U-turn'	for a minimum of	5 damage and a maximum of	89 damage to 'Riolu'.
'Double Hit'	for a minimum of	5 damage and a maximum of	90 damage to 'Riolu'.
'Quick Attack'	for a minimum of	6 damage and a maximum of	102 damage to 'Riolu'.
'Swift'	for a minimum of	6 damage and a maximum of	102 damage to 'Riolu'.
'Astonish'	for a minimum of	8 damage and a maximum of	116 damage to 'Riolu'.
'Tera Blast'	for a minimum of	8 damage and a maximum of	136 damage to 'Riolu'.
'Surf'	for a minimum of	9 damage and a maximum of	153 damage to 'Riolu'.
'Thunderbolt'	for a minimum of	9 damage and a maximum of	153 damage to 'Riolu'.
'Flamethrower'	for a minimum of	9 damage and a maximum of	153 damage to 'Riolu'.
'Dragon Breath'	for a minimum of	9 damage and a maximum of	154 damage to 'Riolu'.
'Hex'	for a minimum of	10 damage and a maximum of	166 damage to 'Riolu'.
'Facade'	for a minimum of	10 damage and a maximum of	178 damage to 'Riolu'.
'Hydro Pump'	for a minimum of	10 damage and a maximum of	186 damage to 'Riolu'.
'Fire Blast'	for a minimum of	10 damage and a maximum of	186 damage to 'Riolu'.

'Thunder'	for a minimum of 10 damage and a maximum of 186 damage to 'Riolu'.
'Dragon Darts'	for a minimum of 11 damage and a maximum of 192 damage to 'Riolu'.
'Solar Beam'	for a minimum of 11 damage and a maximum of 203 damage to 'Riolu'.
'Shadow Ball'	for a minimum of 12 damage and a maximum of 204 damage to 'Riolu'.
'Body Slam'	for a minimum of 12 damage and a maximum of 216 damage to 'Riolu'.
'Dragon Pulse'	for a minimum of 12 damage and a maximum of 217 damage to 'Riolu'.
'Take Down'	for a minimum of 12 damage and a maximum of 228 damage to 'Riolu'.
'Dragon Tail'	for a minimum of 13 damage and a maximum of 229 damage to 'Riolu'.
'Hyper Beam'	for a minimum of 13 damage and a maximum of 254 damage to 'Riolu'.
'Acrobatics'	for a minimum of 16 damage and a maximum of 281 damage to 'Riolu'.
'Double-Edge'	for a minimum of 16 damage and a maximum of 304 damage to 'Riolu'.
'Dragon Claw'	for a minimum of 17 damage and a maximum of 305 damage to 'Riolu'.
'Draco Meteor'	for a minimum of 18 damage and a maximum of 330 damage to 'Riolu'.
'Phantom Force'	for a minimum of 19 damage and a maximum of 343 damage to 'Riolu'.
'Last Resort'	for a minimum of 18 damage and a maximum of 354 damage to 'Riolu'.
'Giga Impact'	for a minimum of 20 damage and a maximum of 380 damage to 'Riolu'.
'Dragon Rush'	for a minimum of 20 damage and a maximum of 381 damage to 'Riolu'.
'Psychic Fangs'	for a minimum of 24 damage and a maximum of 432 damage to 'Riolu'.
'Outrage'	for a minimum of 24 damage and a maximum of 456 damage to 'Riolu'.
'Fly'	for a minimum of 25 damage and a maximum of 457 damage to 'Riolu'.

\$./attack_damage Goodra Comfey 'Sun'

In 'Pokemon Sun', When 'Goodra' attacks 'Comfey', 'Goodra' can use the following moves:

'Infestation'	for a minimum of 1 damage and a maximum of 9 damage to 'Comfey'.
'Absorb'	for a minimum of 2 damage and a maximum of 18 damage to 'Comfey'.
'Brutal Swing'	for a minimum of 2 damage and a maximum of 26 damage to 'Comfey'.
'Feint'	for a minimum of 2 damage and a maximum of 27 damage to 'Comfey'.
'Bubble'	for a minimum of 3 damage and a maximum of 35 damage to 'Comfey'.
'Tackle'	for a minimum of 3 damage and a maximum of 35 damage to 'Comfey'.
'Focus Blast'	for a minimum of 3 damage and a maximum of 51 damage to 'Comfey'.
'Hidden Power'	for a minimum of 4 damage and a maximum of 52 damage to 'Comfey'.
'Bulldoze'	for a minimum of 4 damage and a maximum of 52 damage to 'Comfey'.
'Round'	for a minimum of 4 damage and a maximum of 52 damage to 'Comfey'.
'Facade'	for a minimum of 4 damage and a maximum of 60 damage to 'Comfey'.
'Rock Slide'	for a minimum of 4 damage and a maximum of 65 damage to 'Comfey'.
'Body Slam'	for a minimum of 5 damage and a maximum of 73 damage to 'Comfey'.
'Muddy Water'	for a minimum of 5 damage and a maximum of 77 damage to 'Comfey'.
'Flamethrower'	for a minimum of 5 damage and a maximum of 77 damage to 'Comfey'.
'Ice Beam'	for a minimum of 5 damage and a maximum of 77 damage to 'Comfey'.
'Thunderbolt'	for a minimum of 5 damage and a maximum of 77 damage to 'Comfey'.
'Aqua Tail'	for a minimum of 5 damage and a maximum of 77 damage to 'Comfey'.
'Earthquake'	for a minimum of 5 damage and a maximum of 86 damage to 'Comfey'.
'Poison Tail'	for a minimum of 7 damage and a maximum of 88 damage to 'Comfey'.
'Blizzard'	for a minimum of 6 damage and a maximum of 94 damage to 'Comfey'.
'Fire Blast'	for a minimum of 6 damage and a maximum of 94 damage to 'Comfey'.
'Thunder'	for a minimum of 6 damage and a maximum of 94 damage to 'Comfey'.
'Power Whip'	for a minimum of 6 damage and a maximum of 102 damage to 'Comfey'.
'Hyper Beam'	for a minimum of 7 damage and a maximum of 128 damage to 'Comfey'.
'Giga Impact'	for a minimum of 7 damage and a maximum of 128 damage to 'Comfey'.
'Sludge Bomb'	for a minimum of 10 damage and a maximum of 155 damage to 'Comfey'.
'Sludge Wave'	for a minimum of 11 damage and a maximum of 163 damage to 'Comfey'.
'Iron Tail'	for a minimum of 11 damage and a maximum of 172 damage to 'Comfey'.

```
$ ./attack_damage 'Hisuian Avalugg' Gliscor 'Legends: Arceus'
```

In 'Pokemon Legends: Arceus', When 'Hisuian Avalugg' attacks 'Gliscor', 'Hisuian Avalugg' can use the following moves:

'Hyper Beam'	for a minimum of	1 damage and a maximum of	2 damage to 'Gliscor'.
'Flash Cannon'	for a minimum of	1 damage and a maximum of	2 damage to 'Gliscor'.
'Water Pulse'	for a minimum of	3 damage and a maximum of	4 damage to 'Gliscor'.
'Ice Beam'	for a minimum of	10 damage and a maximum of	12 damage to 'Gliscor'.
'Blizzard'	for a minimum of	10 damage and a maximum of	12 damage to 'Gliscor'.
'Powder Snow'	for a minimum of	10 damage and a maximum of	12 damage to 'Gliscor'.
'Icy Wind'	for a minimum of	10 damage and a maximum of	12 damage to 'Gliscor'.
'Rock Smash'	for a minimum of	1 damage and a maximum of	17 damage to 'Gliscor'.
'Tackle'	for a minimum of	3 damage and a maximum of	35 damage to 'Gliscor'.
'Bite'	for a minimum of	4 damage and a maximum of	52 damage to 'Gliscor'.
'Iron Head'	for a minimum of	4 damage and a maximum of	69 damage to 'Gliscor'.
'Crunch'	for a minimum of	4 damage and a maximum of	69 damage to 'Gliscor'.
'Rock Slide'	for a minimum of	7 damage and a maximum of	97 damage to 'Gliscor'.
'Double-Edge'	for a minimum of	6 damage and a maximum of	102 damage to 'Gliscor'.
'Giga Impact'	for a minimum of	7 damage and a maximum of	128 damage to 'Gliscor'.
'Stone Edge'	for a minimum of	8 damage and a maximum of	129 damage to 'Gliscor'.
'Ice Ball'	for a minimum of	17 damage and a maximum of	163 damage to 'Gliscor'.
'Ice Shard'	for a minimum of	19 damage and a maximum of	213 damage to 'Gliscor'.
'Ice Fang'	for a minimum of	26 damage and a maximum of	339 damage to 'Gliscor'.
'Mountain Gale'	for a minimum of	34 damage and a maximum of	516 damage to 'Gliscor'.

```
$ ./attack_damage 'Darmanitan - Galarian Zen Mode' 'Darmanitan - Galarian Standard Mode' 'Black 2'
```

In 'Pokemon Black 2', When 'Darmanitan - Galarian Zen Mode' attacks 'Darmanitan - Galarian Standard Mode', 'Darmanitan - Galar

'Hidden Power'	for a minimum of	1 damage and a maximum of	2 damage to 'Darmanitan - Galarian Standard Mode'.
'Uproar'	for a minimum of	1 damage and a maximum of	2 damage to 'Darmanitan - Galarian Standard Mode'.
'Solar Beam'	for a minimum of	1 damage and a maximum of	2 damage to 'Darmanitan - Galarian Standard Mode'.
'Snore'	for a minimum of	1 damage and a maximum of	2 damage to 'Darmanitan - Galarian Standard Mode'.
'Round'	for a minimum of	1 damage and a maximum of	2 damage to 'Darmanitan - Galarian Standard Mode'.
'Psychic'	for a minimum of	1 damage and a maximum of	2 damage to 'Darmanitan - Galarian Standard Mode'.
'Hyper Beam'	for a minimum of	1 damage and a maximum of	2 damage to 'Darmanitan - Galarian Standard Mode'.
'Focus Blast'	for a minimum of	3 damage and a maximum of	4 damage to 'Darmanitan - Galarian Standard Mode'.
'Overheat'	for a minimum of	5 damage and a maximum of	6 damage to 'Darmanitan - Galarian Standard Mode'.
'Flamethrower'	for a minimum of	5 damage and a maximum of	6 damage to 'Darmanitan - Galarian Standard Mode'.
'Heat Wave'	for a minimum of	5 damage and a maximum of	6 damage to 'Darmanitan - Galarian Standard Mode'.
'Incinerate'	for a minimum of	5 damage and a maximum of	6 damage to 'Darmanitan - Galarian Standard Mode'.
'Fire Blast'	for a minimum of	5 damage and a maximum of	6 damage to 'Darmanitan - Galarian Standard Mode'.
'Rage'	for a minimum of	3 damage and a maximum of	35 damage to 'Darmanitan - Galarian Standard Mode'.
'Tackle'	for a minimum of	4 damage and a maximum of	69 damage to 'Darmanitan - Galarian Standard Mode'.
'Payback'	for a minimum of	5 damage and a maximum of	86 damage to 'Darmanitan - Galarian Standard Mode'.
'Thief'	for a minimum of	6 damage and a maximum of	102 damage to 'Darmanitan - Galarian Standard Mode'.
'Bulldoze'	for a minimum of	6 damage and a maximum of	102 damage to 'Darmanitan - Galarian Standard Mode'.
'Rollout'	for a minimum of	8 damage and a maximum of	104 damage to 'Darmanitan - Galarian Standard Mode'.
'Headbutt'	for a minimum of	7 damage and a maximum of	119 damage to 'Darmanitan - Galarian Standard Mode'.
'Facade'	for a minimum of	7 damage and a maximum of	119 damage to 'Darmanitan - Galarian Standard Mode'.
'U-turn'	for a minimum of	7 damage and a maximum of	119 damage to 'Darmanitan - Galarian Standard Mode'.
'Strength'	for a minimum of	8 damage and a maximum of	136 damage to 'Darmanitan - Galarian Standard Mode'.
'Dig'	for a minimum of	8 damage and a maximum of	136 damage to 'Darmanitan - Galarian Standard Mode'.
'Zen Headbutt'	for a minimum of	8 damage and a maximum of	136 damage to 'Darmanitan - Galarian Standard Mode'.
'Rock Smash'	for a minimum of	9 damage and a maximum of	138 damage to 'Darmanitan - Galarian Standard Mode'.


```

'Take Down'    for a minimum of 9 damage and a maximum of 153 damage to 'Darmanitan - Galarian Standard Mode'.
'Earthquake'   for a minimum of 9 damage and a maximum of 170 damage to 'Darmanitan - Galarian Standard Mode'.
'Smack Down'   for a minimum of 11 damage and a maximum of 172 damage to 'Darmanitan - Galarian Standard Mode'.
'Thrash'       for a minimum of 11 damage and a maximum of 203 damage to 'Darmanitan - Galarian Standard Mode'.
'Rock Tomb'    for a minimum of 13 damage and a maximum of 205 damage to 'Darmanitan - Galarian Standard Mode'.
'Giga Impact' for a minimum of 13 damage and a maximum of 254 damage to 'Darmanitan - Galarian Standard Mode'.
'Brick Break'  for a minimum of 15 damage and a maximum of 256 damage to 'Darmanitan - Galarian Standard Mode'.
'Rock Slide'   for a minimum of 15 damage and a maximum of 256 damage to 'Darmanitan - Galarian Standard Mode'.
'Flame Charge' for a minimum of 17 damage and a maximum of 258 damage to 'Darmanitan - Galarian Standard Mode'.
'Flame Wheel'  for a minimum of 19 damage and a maximum of 308 damage to 'Darmanitan - Galarian Standard Mode'.
'Fire Fang'    for a minimum of 21 damage and a maximum of 333 damage to 'Darmanitan - Galarian Standard Mode'.
'Hammer Arm'   for a minimum of 19 damage and a maximum of 340 damage to 'Darmanitan - Galarian Standard Mode'.
'Stone Edge'   for a minimum of 19 damage and a maximum of 340 damage to 'Darmanitan - Galarian Standard Mode'.
'Fire Punch'   for a minimum of 23 damage and a maximum of 384 damage to 'Darmanitan - Galarian Standard Mode'.
'Superpower'   for a minimum of 22 damage and a maximum of 407 damage to 'Darmanitan - Galarian Standard Mode'.
'Focus Punch'  for a minimum of 27 damage and a maximum of 508 damage to 'Darmanitan - Galarian Standard Mode'.
'Flare Blitz'  for a minimum of 34 damage and a maximum of 610 damage to 'Darmanitan - Galarian Standard Mode'.

```

following are a selection of error conditions and their corresponding error messages that your script be able to handle:

```

$ ./attack_damage Grumpig Grumpig 'Glass'

'Pokemon Glass' isn't a game in the Pokemon series.

$ ./attack_damage Aipom Fluffluff 'Heart Gold'

'Fluffluff' isn't a Pokemon that exists.

$ ./attack_damage Cacturne Grumpig 'Red'

'Cacturne' doesn't appear in 'Pokemon Red'.

# Either the attacking pokemon doesn't learn any moves or all moves deal 0 damage
$ ./attack_damage Smeargle Passimian 'Ultra Moon'

In 'Pokemon Ultra Moon', 'Smeargle' can't attack 'Passimian'.

```