Name : Saefulloh Fatah Putra Kyranna

Class : 2I

Absent No. : 23

**MID-TERM EXAMINATION (UTS)**

**Mata Kuliah** **:** Statistik Komputasi

**Dosen** **:** Muhammad Afif Hendawan, S.Kom., M.T.

  Elok Nur Hamdana, S.T., M.T.

  Sofyan Noor Arief, S.ST., M.Kom.,

  Septian Enggar Sukmana, S.Pd., M.T.

**Waktu** **:** 200 Menit

**Sifat** **:** Open Book

You will use Pokemon data which can be accessed by this [link](https://1drv.ms/x/s!AiENoO6hIwRrkjf5cgJ1XBhaW1s_?e=Uq7NpI). Your uploaded work must provide the justification of the calculation!

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Rule:

* You are allowed to use one of these tools, such: Google Spreadsheet, Microsoft Excel, Pandas Python
* You are prohibited to use these several tools: Analysis Toolpak Ms. Excel, SPSS, LISREL, JASP, etc.
* **BE CONFIDENT TO DO YOUR EXAM BY YOURSELF**

1. Complete your Pokemon data! Non-complete data of your Pokemon may affect to your score (50% point discount).
2. Calculate on “HP”,
3. Determine the mean, variance, and its standard deviation. **(5 pts)**
4. Determine the Q1, Q2, and Q3. **(5 pts)**
5. Is there any *outliers*? Mention if any! **(5 pts)**
6. Based on your calculation at No. 2, make these several things:
7. Boxplot of “HP” **(10 pts)**
8. Histogram of “HP” with the *bins* is 100. **(10 pts)**
9. Based on mean and standard deviation from No. 2, determine
10. The *z-score* to Pokemon which has CP value up to 400 **(10 pts)**
11. Probability of Pokemon which has DEF more than 60 **(10 pts)**

Note:

* Use 3 decimal rounded for mean and standard deviation
* Use 2 decimal no-rounded for z-score.
* Use all decimal no-rounded for probability score

1. Determine,
2. Probability of “CAUGHT” and “FLEE”. **(5 pts)**
3. By choosing Pokemon 10 times randomly, what is the probability of 3 electric Pokemons? **(20 pts)**
4. Use bar chart to represent the distribution of any Pokemons which are caught at Polinema using 10 point scale. **(20 poin)**

Catatan: Gunakan seluruh nilai desimal yang ada.

Answer :

1. Data Used

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| class | group | Pokemon | date\_caught | location | type | status | attack | hp | def | cp |
| TI 2I | A | Flaeron | 15/03/2023 | Univ Brawijaya | Fire | Caught | 246 | 103 | 179 | 1648 |
| TI 2I | A | Ninetales | 15/03/2023 | Univ Brawijaya | Fire | Caught | 169 | 121 | 190 | 1461 |
| TI 2I | A | Furfrou | 15/03/2023 | Univ Brawijaya | Normal | Caught | 164 | 128 | 167 | 1403 |
| TI 2I | A | Throh | 15/03/2023 | Univ Brawijaya | Fighting | Caught | 172 | 157 | 160 | 1288 |
| TI 2I | A | Heracross | 15/03/2023 | Univ Brawijaya | Bug/Fighting | Caught | 234 | 105 | 179 | 1243 |
| TI 2I | A | Oddish | 15/03/2023 | Univ Brawijaya | Grass/Poison | Caught | 131 | 12 | 112 | 14 |
| TI 2I | A | Arbok | 15/03/2023 | Univ Brawijaya | Poison | Caught | 167 | 108 | 153 | 1204 |
| TI 2I | A | Feraligatr | 15/03/2023 | Univ Brawijaya | Water | Caught | 205 | 52 | 188 | 287 |
| TI 2I | A | Lairon | 15/03/2023 | Univ Brawijaya | Steel/Rock | Caught | 158 | 27 | 198 | 80 |
| TI 2I | A | Chinchou | 15/03/2023 | Univ Brawijaya | Water/Electric | Caught | 106 | 106 | 97 | 485 |
| TI 2I | A | Tranquill | 15/03/2023 | Univ Brawijaya | Normal/Flying | Caught | 144 | 47 | 107 | 173 |
| TI 2I | A | Ledyba | 15/03/2023 | Univ Brawijaya | Bug/Flying | Caught | 72 | 65 | 118 | 251 |
| TI 2I | A | Masquerain | 15/03/2023 | Univ Brawijaya | Bug/Flying | Caught | 192 | 121 | 150 | 1533 |
| TI 2I | A | Togedemaru | 15/03/2023 | Univ Brawijaya | Electric/Steel | Caught | 190 | 120 | 145 | 1595 |
| TI 2I | A | Pidove | 15/03/2023 | Univ Brawijaya | Normal/Flying | Caught | 98 | 65 | 80 | 268 |
| TI 2I | A | Surskit | 15/03/2023 | Univ Brawijaya | Bug/Water | Caught | 93 | 75 | 87 | 382 |
| TI 2I | A | Surskit | 15/03/2023 | Univ Brawijaya | Bug/Water | Caught | 93 | 90 | 87 | 519 |
| TI 2I | A | Pidove | 15/03/2023 | Univ Brawijaya | Electric/Steel | Caught | 98 | 40 | 80 | 104 |
| TI 2I | A | Tranquill | 15/03/2023 | Univ Brawijaya | Normal/Flying | Caught | 144 | 47 | 97 | 173 |
| TI 2I | A | Pikachu | 15/03/2023 | Univ Brawijaya | Electric | Caught | 112 | 33 | 96 | 111 |
| TI 2I | A | Grubbin | 15/03/2023 | Univ Brawijaya | Bug | Caught | 62 | 107 | 45 | 769 |
| TI 2I | A | Tynamo | 15/03/2023 | Univ Brawijaya | Electric | Caught | 55 | 72 | 40 | 423 |
| TI 2I | A | Pidove | 15/03/2023 | Univ Brawijaya | Normal/Flying | Caught | 55 | 103 | 50 | 586 |
| TI 2I | A | Stufful | 15/03/2023 | Univ Brawijaya | Normal/Fighting | Caught | 75 | 80 | 50 | 378 |
| TI 2I | A | Magikarp | 15/03/2023 | Univ Brawijaya | Water | Caught | 10 | 44 | 8 | 92 |
| TI 2I | A | Masquearin | 15/03/2023 | Univ Brawijaya | Bug/Flying | Flee | 60 | 70 | 62 | 881 |
| TI 2I | A | Karrablast | 15/03/2023 | Univ Brawijaya | Bug | Caught | 50 | 68 | 45 | 376 |
| TI 2I | A | Surskit | 15/03/2023 | Univ Brawijaya | Bug/Water | Caught | 32 | 53 | 30 | 186 |
| TI 2I | A | Yanma | 15/03/2023 | Univ Brawijaya | Bug/Flying | Caught | 65 | 91 | 45 | 576 |
| TI 2I | A | Surskit | 15/03/2023 | Univ Brawijaya | Bug/Water | Caught | 32 | 74 | 30 | 405 |
| TI 2I | A | Cyndaquil | 15/03/2023 | Univ Brawijaya | Fire | Caught | 50 | 25 | 60 | 59 |
| TI 2I | A | Typhlosion | 15/03/2023 | Univ Brawijaya | Fire | Caught | 109 | 82 | 85 | 775 |
| TI 2I | A | Grubbin | 15/03/2023 | Univ Brawijaya | Bug | Caught | 89 | 55 | 45 | 578 |
| TI 2I | A | Vulpix | 15/03/2023 | Univ Brawijaya | Fire | Caught | 60 | 50 | 65 | 309 |
| TI 2I | A | Lillipup | 15/03/2023 | Univ Brawijaya | Normal | Caught | 93 | 25 | 45 | 574 |
| TI 2I | A | Surskit | 15/03/2023 | Univ Brawijaya | Bug/Water | Caught | 50 | 87 | 60 | 468 |
| TI 2I | A | Doduo | 15/03/2023 | Univ Brawijaya | Normal/Flying | Caught | 75 | 87 | 50 | 871 |
| TI 2I | A | Aron | 15/03/2023 | Univ Brawijaya | Steel/Rock | Caught | 109 | 100 | 77 | 879 |
| TI 2I | A | Tynamo | 15/03/2023 | Univ Brawijaya | Electric | Caught | 80 | 72 | 66 | 423 |
| TI 2I | A | Grubbin | 15/03/2023 | Univ Brawijaya | Bug | Caught | 98 | 107 | 54 | 769 |
| TI 2I | A | Ledyba | 15/03/2023 | Univ Brawijaya | Bug/Flying | Flee | 20 | 40 | 30 | 544 |
| TI 2I | A | Surskit | 15/03/2023 | Univ Brawijaya | Bug/Water | Caught | 50 | 52 | 60 | 199 |
| TI 2I | A | Caterpie | 15/03/2023 | Univ Brawijaya | Bug | Caught | 55 | 53 | 55 | 102 |
| TI 2I | A | Sandshrew | 15/03/2023 | Univ Brawijaya | Ground | Caught | 126 | 97 | 120 | 773 |
| TI 2I | A | Lillipup | 15/03/2023 | Univ Brawijaya | Normal | Caught | 93 | 29 | 45 | 57 |
| TI 2I | A | Doduo | 15/03/2023 | Univ Brawijaya | Normal/Flying | Caught | 75 | 86 | 50 | 874 |
| TI 2I | A | Slugma | 15/03/2023 | Univ Brawijaya | Fire | Caught | 118 | 79 | 71 | 445 |
| TI 2I | A | Surskit | 15/03/2023 | Univ Brawijaya | Bug/Water | Caught | 50 | 49 | 60 | 170 |
| TI 2I | A | Aron | 15/03/2023 | Univ Brawijaya | Steel/Rock | Caught | 121 | 29 | 141 | 81 |
| TI 2I | B | Caterpie | 14/03/2023 | Sudimoro | Bug | Caught | 55 | 34 | 55 | 43 |
| TI 2I | B | Shelmet | 15/03/2023 | Polinema | Bug | Caught | 72 | 38 | 140 | 76 |
| TI 2I | B | Clauncher | 15/03/2023 | Polinema | Water | Caught | 108 | 40 | 117 | 131 |
| TI 2I | B | Starly | 15/03/2023 | Polinema | Normal/Flying | Caught | 101 | 12 | 58 | 10 |
| TI 2I | B | Ledyba | 15/03/2023 | Polinema | Bug/Flying | Caught | 72 | 12 | 118 | 10 |
| TI 2I | B | Patrat | 15/03/2023 | Polinema | Normal | Caught | 98 | 57 | 73 | 189 |
| TI 2I | B | Caterpie | 15/03/2023 | Polinema | bug | Caught | 55 | 42 | 55 | 68 |
| TI 2I | B | Starly | 15/03/2023 | Polinema | Normal/Flying | Caught | 101 | 45 | 58 | 124 |
| TI 2I | B | Zubat | 15/03/2023 | Polinema | Poison/Flying | Caught | 83 | 38 | 73 | 85 |
| TI 2I | B | Magikarp | 15/03/2023 | Polinema | Water | Caught | 29 | 50 | 85 | 108 |
| TI 2I | B | Shroomish | 15/03/2023 | Polinema | Grass | Caught | 74 | 35 | 110 | 54 |
| TI 2I | B | Ledyba | 15/03/2023 | Polinema | Bug/Flying | Caught | 72 | 55 | 118 | 193 |
| TI 2I | B | Pidove | 15/03/2023 | Polinema | Normal/Flying | Caught | 98 | 13 | 80 | 10 |
| TI 2I | B | Tynamo | 15/03/2023 | Polinema | Electric | Caught | 105 | 55 | 78 | 268 |
| TI 2I | B | Lillipup | 15/03/2023 | Polinema | Normal | Caught | 107 | 12 | 86 | 12 |
| TI 2I | B | Hoppip | 15/03/2023 | Polinema | Grass/Flying | Caught | 67 | 38 | 94 | 98 |
| TI 2I | B | Caterpie | 15/03/2023 | Saxophone | Bug | Caught | 55 | 28 | 55 | 25 |
| TI 2I | B | Cyndaquil | 15/03/2023 | Saxophone | Fire | Caught | 116 | 45 | 93 | 166 |
| TI 2I | B | Starly | 15/03/2023 | Saxophone | Normal/Flying | Caught | 101 | 43 | 58 | 113 |
| TI 2I | B | Tranquill | 15/03/2023 | Saxophone | Normal/Flying | Caught | 144 | 56 | 107 | 243 |
| TI 2I | B | Charmander | 15/03/2023 | Saxophone | Fire | Caught | 116 | 12 | 93 | 12 |
| TI 2I | B | Burmy | 15/03/2023 | Saxophone | Bug | Caught | 53 | 39 | 83 | 71 |
| TI 2I | B | Lillipup | 15/03/2023 | Saxophone | Grass | Caught | 107 | 23 | 86 | 34 |
| TI 2I | B | Hoppip | 15/03/2023 | Saxophone | Grass/Flying | Caught | 67 | 24 | 94 | 35 |
| TI 2I | B | Hoppip | 16/03/2023 | Dau | Grass/Flying | Caught | 67 | 33 | 94 | 70 |
| TI 2I | B | Tynamo | 16/03/2023 | Dau | Electric | Caught | 105 | 41 | 78 | 137 |
| TI 2I | B | Cyndaquil | 16/03/2023 | Dau | Fire | Caught | 116 | 35 | 93 | 116 |
| TI 2I | B | Starly | 16/03/2023 | Dau | Normal/Flying | Caught | 101 | 31 | 58 | 65 |
| TI 2I | B | Shroomish | 16/03/2023 | Dau | Grass | Caught | 74 | 14 | 110 | 10 |
| TI 2I | B | Castform | 16/03/2023 | Polinema | Normal | Caught | 139 | 72 | 139 | 393 |
| TI 2I | B | Weedle | 16/03/2023 | Polinema | Bug/Poison | Caught | 63 | 48 | 50 | 87 |
| TI 2I | B | Solrock | 16/03/2023 | Polinema | Rock/Psychic | Caught | 178 | 85 | 153 | 543 |
| TI 2I | B | Starly | 16/03/2023 | Polinema | Normal/Flying | Caught | 101 | 66 | 58 | 268 |
| TI 2I | B | Purrloin | 16/03/2023 | Polinema | Dark | Caught | 98 | 22 | 73 | 28 |
| TI 2I | B | Tynamo | 16/03/2023 | Polinema | Electric | Caught | 105 | 41 | 78 | 147 |
| TI 2I | B | Lillipup | 17/03/2023 | Polinema | Normal | Caught | 107 | 13 | 86 | 12 |
| TI 2I | B | Bunnelby | 17/03/2023 | Polinema | Normal | Caught | 68 | 27 | 72 | 33 |
| TI 2I | B | Froakie | 17/03/2023 | Polinema | Water | Caught | 122 | 20 | 84 | 37 |
| TI 2I | B | Weedle | 17/03/2023 | Polinema | Bug/Poison | Caught | 63 | 53 | 50 | 108 |
| TI 2I | B | Pidove | 17/03/2023 | Polinema | Normal/Flying | Caught | 98 | 57 | 80 | 170 |
| TI 2I | B | Pidove | 17/03/2023 | Polinema | Normal/Flying | Caught | 98 | 60 | 80 | 205 |
| TI 2I | B | Ledyba | 17/03/2023 | Polinema | Bug/Flying | Caught | 72 | 50 | 118 | 152 |
| TI 2I | B | Stufful | 17/03/2023 | Polinema | Normal/Fighting | Caught | 136 | 77 | 95 | 367 |
| TI 2I | B | Pidove | 17/03/2023 | Suhat | Normal/Flying | Caught | 98 | 50 | 80 | 155 |
| TI 2I | B | Weedle | 17/03/2023 | Suhat | Bug/Poison | Caught | 63 | 55 | 50 | 105 |
| TI 2I | B | Chinchou | 17/03/2023 | Suhat | Water/Electric | Caught | 106 | 61 | 97 | 163 |
| TI 2I | B | Tranquill | 17/03/2023 | Suhat | Normal/Flying | Caught | 144 | 36 | 107 | 96 |
| TI 2I | B | Patrat | 17/03/2023 | Suhat | Normal | Caught | 98 | 50 | 73 | 167 |
| TI 2I | B | Ledyba | 17/03/2023 | Suhat | Bug/Flying | Caught | 72 | 33 | 118 | 66 |
| TI 2I | B | Togedemaru | 17/03/2023 | Suhat | Electric/Steel | Caught | 190 | 29 | 145 | 90 |
| TI 2I | B | Sentret | 17/03/2023 | Suhat | Normal | Caught | 79 | 25 | 73 | 39 |
| TI 2I | B | Sunkern | 17/03/2023 | Suhat | Grass | Caught | 55 | 23 | 55 | 21 |
| TI 2I | B | Grubbin | 17/03/2023 | Suhat | Bug | Caught | 115 | 47 | 85 | 160 |
| TI 2I | B | Sandslash | 17/03/2023 | Suhat | Ground | Caught | 182 | 74 | 175 | 541 |
| TI 2I | B | Tynamo | 17/03/2023 | Suhat | Electric | Caught | 105 | 53 | 78 | 251 |
| TI 2I | B | Ekans | 17/03/2023 | Suhat | Poison | Flee | 110 | 111 | 97 | 230 |
| TI 2I | B | Weedle | 17/03/2023 | Suhat | Bug/Poison | Flee | 63 | 120 | 60 | 243 |
| TI 2I | C | Bulbasaur | 18/03/2023 | Polinema | Grass/Poison | Caught | 49 | 12 | 49 | 14 |
| TI 2I | C | Caterpie | 18/03/2023 | Polinema | Bug | Caught | 84 | 46 | 79 | 60 |
| TI 2I | C | pikachu | 18/03/2023 | Polinema | Electric | Caught | 78 | 45 | 87 | 189 |
| TI 2I | C | diglett | 18/03/2023 | Polinema | Ground | Caught | 96 | 23 | 82 | 101 |
| TI 2I | C | drownzee | 18/03/2023 | Univ Brawijaya | Psychic | Caught | 37 | 69 | 123 | 279 |
| TI 2I | C | Voltrob | 18/03/2023 | Univ Brawijaya | Electric | Caught | 118 | 71 | 50 | 414 |
| TI 2I | C | Hitmonlee | 19/03/2023 | Univ Brawijaya | Fighting | Caught | 105 | 45 | 109 | 390 |
| TI 2I | C | Magikarp | 19/03/2023 | Univ Brawijaya | Water | Caught | 68 | 10 | 85 | 10 |
| TI 2I | C | Eevee | 19/03/2023 | Univ Brawijaya | Normal | Caught | 63 | 67 | 48 | 288 |
| TI 2I | C | Hoothoot | 19/03/2023 | Univ Brawijaya | Normal/Flying | Caught | 46 | 76 | 59 | 187 |
| TI 2I | C | Starly | 19/03/2023 | Univ Malang | Electric | Caught | 35 | 24 | 101 | 36 |
| TI 2I | C | Nosepass | 19/03/2023 | Univ Malang | Grass/Flying | Caught | 53 | 19 | 103 | 21 |
| TI 2I | C | Hoppip | 19/03/2023 | Polinema | Normal | Caught | 49 | 37 | 99 | 82 |
| TI 2I | C | Teddiursa | 18/03/2023 | Polinema | Normal | Caught | 51 | 69 | 110 | 204 |
| TI 2I | C | Slugma | 18/03/2023 | Polinema | Grace/Ice | Caught | 74 | 45 | 115 | 153 |
| TI 2I | C | Houndour | 18/03/2023 | Polinema | Normal | Caught | 60 | 87 | 98 | 487 |
| TI 2I | C | Himontop | 18/03/2023 | Polinema | Water | Caught | 89 | 78 | 43 | 394 |
| TI 2I | C | Nosepass | 18/03/2023 | Polinema | Normal | Caught | 75 | 73 | 42 | 325 |
| TI 2I | C | Volbeat | 18/03/2023 | Polinema | Normal | Caught | 39 | 62 | 30 | 268 |
| TI 2I | C | Castform | 19/03/2023 | Polinema | Dark | Caught | 44 | 55 | 90 | 221 |
| TI 2I | C | Starly | 19/03/2023 | Univ Brawijaya | Fire | Caught | 44 | 82 | 32 | 444 |
| TI 2I | C | Glameow | 19/03/2023 | Univ Brawijaya | Normal/Flying | Caught | 92 | 62 | 46 | 242 |
| TI 2I | C | Bidoof | 19/03/2023 | Univ Brawijaya | Normal/Flying | Caught | 111 | 86 | 37 | 520 |
| TI 2I | C | Buneary | 19/03/2023 | Univ Brawijaya | Rock | Caught | 109 | 70 | 33 | 323 |
| TI 2I | C | Snower | 19/03/2023 | Univ Brawijaya | Ground | Caught | 32 | 99 | 31 | 749 |
| TI 2I | C | Oshawott | 19/03/2023 | Univ Brawijaya | Dark | Caught | 124 | 32 | 41 | 77 |
| TI 2I | C | Patrat | 19/03/2023 | Univ Brawijaya | Bug/Poison | Caught | 47 | 48 | 90 | 185 |
| TI 2I | C | Lillipup | 19/03/2023 | Univ Brawijaya | Normal | Caught | 80 | 31 | 114 | 57 |
| TI 2I | C | Purrloin | 19/03/2023 | Univ Brawijaya | Grass/Poison | Caught | 77 | 98 | 103 | 420 |
| TI 2I | C | Pansear | 19/03/2023 | Univ Brawijaya | Grace/steel | Caught | 74 | 69 | 77 | 365 |
| TI 2I | C | Pidove | 19/03/2023 | Univ Brawijaya | Bug | Caught | 51 | 79 | 37 | 371 |
| TI 2I | C | Tranquill | 19/03/2023 | Univ Brawijaya | Ground/Electric | Caught | 114 | 138 | 52 | 1030 |
| TI 2I | C | Roggenrola | 19/03/2023 | Univ Brawijaya | Fire | Caught | 46 | 23 | 67 | 38 |
| TI 2I | C | Drilbur | 19/03/2023 | Univ Brawijaya | Grass | Caught | 120 | 77 | 54 | 425 |
| TI 2I | C | Purrloin | 19/03/2023 | Univ Brawijaya | Fire | Caught | 52 | 61 | 111 | 314 |
| TI 2I | C | Vanipeda | 19/03/2023 | Univ Brawijaya | Ground/Electric | Caught | 104 | 22 | 40 | 98 |
| TI 2I | C | pikachu | 19/03/2023 | Barawijaya | Electric | Caught | 57 | 77 | 31 | 425 |
| TI 2I | C | diglett | 19/03/2023 | Barawijaya | Ground | Caught | 50 | 61 | 112 | 314 |
| TI 2I | C | Drowzee | 19/03/2023 | Barawijaya | Psychic | Caught | 49 | 22 | 57 | 98 |
| TI 2I | C | Voltrob | 19/03/2023 | Barawijaya | Electric | Caught | 63 | 62 | 95 | 236 |
| TI 2I | C | Hitmonlee | 19/03/2023 | Barawijaya | Fighting | Caught | 56 | 56 | 69 | 198 |
| TI 2I | D | Teddiursa | 19/03/2023 | Polinema | Normal | Caught | 142 | 61 | 93 | 251 |
| TI 2I | D | Chinchou | 18/03/2023 | Polinema | Water/Electric | Caught | 106 | 88 | 97 | 333 |
| TI 2I | D | Yungoos | 18/03/2023 | Polinema | Normal | Caught | 122 | 53 | 56 | 157 |
| TI 2I | D | Weedle | 18/03/2023 | Polinema | Bug/Poison | Caught | 122 | 44 | 56 | 72 |
| TI 2I | D | Froakie | 18/03/2023 | Polinema | Water | Caught | 122 | 63 | 84 | 340 |
| TI 2I | D | Ekans | 18/03/2023 | Polinema | Poison | Caught | 110 | 10 | 97 | 11 |
| TI 2I | D | Oddish | 18/03/2023 | Polinema | Grass/Poison | Caught | 131 | 42 | 112 | 190 |
| TI 2I | D | Stunky | 18/03/2023 | Polinema | Poison/Dark | Caught | 121 | 29 | 90 | 45 |
| TI 2I | D | Gastly | 18/03/2023 | Polinema | Ghost/Poison | Caught | 186 | 43 | 67 | 289 |
| TI 2I | D | Stufful | 18/03/2023 | Polinema | Normal/Fighting | Caught | 136 | 17 | 95 | 17 |
| TI 2I | D | Duoduo | 18/03/2023 | Polinema | Normal/Flying | Caught | 158 | 39 | 83 | 217 |
| TI 2I | D | Pidove | 18/03/2023 | Polinema | Normal/Flying | Caught | 98 | 63 | 80 | 217 |
| TI 2I | D | Voltrob | 18/03/2023 | Polinema | Electric | Caught | 109 | 61 | 111 | 326 |
| TI 2I | D | Oddish | 18/03/2023 | Polinema | Grass/Poison | Caught | 131 | 39 | 112 | 153 |
| TI 2I | D | Purrloin | 18/03/2023 | Polinema | Dark | Caught | 98 | 44 | 73 | 124 |
| TI 2I | D | Zubat | 18/03/2023 | Polinema | Poison/Flying | Caught | 83 | 64 | 73 | 228 |
| TI 2I | D | Tympole | 18/03/2023 | Polinema | Water | Caught | 98 | 42 | 78 | 92 |
| TI 2I | D | Chinchou | 18/03/2023 | Polinema | Water/Electric | Caught | 106 | 47 | 97 | 104 |
| TI 2I | D | Froakie | 18/03/2023 | Polinema | Water | Caught | 122 | 44 | 84 | 173 |
| TI 2I | D | Glameow | 18/03/2023 | Polinema | Normal | Caught | 109 | 43 | 82 | 125 |
| TI 2I | D | Pansage | 18/03/2023 | Polinema | Grass | Caught | 104 | 28 | 94 | 95 |
| TI 2I | D | Glameow | 17/03/2023 | Polinema | Normal | Caught | 109 | 14 | 82 | 11 |
| TI 2I | D | Magikarp | 17/03/2023 | Polinema | Water | Caught | 29 | 34 | 85 | 40 |
| TI 2I | D | Karrablast | 17/03/2023 | Polinema | Bug | Caught | 137 | 36 | 87 | 108 |
| TI 2I | D | Aron | 15/03/2023 | Polinema | Steel/Rock | Caught | 121 | 53 | 141 | 251 |
| TI 2I | D | Starly | 15/03/2023 | Polinema | Normal/Flying | Caught | 101 | 46 | 58 | 141 |
| TI 2I | D | Caterpie | 15/03/2023 | Polinema | Bug | Caught | 55 | 50 | 55 | 75 |
| TI 2I | D | Surskit | 15/03/2023 | Polinema | Bug/Water | Caught | 93 | 43 | 87 | 142 |
| TI 2I | D | Primeape | 15/03/2023 | Polinema | Fighting | Caught | 207 | 47 | 138 | 280 |
| TI 2I | D | Ledyba | 15/03/2023 | Polinema | Bug/Flying | Caught | 72 | 34 | 118 | 73 |
| TI 2I | D | Solrock | 15/03/2023 | Polinema | Rock/Psychic | Caught | 178 | 69 | 153 | 350 |
| TI 2I | D | Ekans | 15/03/2023 | Polinema | Poison | Caught | 110 | 40 | 97 | 164 |
| TI 2I | D | Patrat | 15/03/2023 | Polinema | Normal | Caught | 98 | 62 | 73 | 231 |
| TI 2I | D | Hoppip | 14/03/2023 | Polinema | Grass/Flying | Caught | 67 | 23 | 94 | 29 |
| TI 2I | D | Teddiursa | 14/03/2023 | Polinema | Normal | Caught | 142 | 53 | 93 | 203 |
| TI 2I | D | Bunnelby | 14/03/2023 | Polinema | Normal | Caught | 68 | 37 | 72 | 62 |
| TI 2I | D | Vulpix | 14/03/2023 | Polinema | Fire | Caught | 96 | 36 | 109 | 102 |
| TI 2I | D | Foongus | 14/03/2023 | Polinema | Grass/Poison | Caught | 97 | 61 | 91 | 166 |
| TI 2I | D | Zubat | 14/03/2023 | Polinema | Poison/Flying | Caught | 83 | 49 | 73 | 126 |
| TI 2I | D | Drifblim | 14/03/2023 | Polinema | Ghost/Flying | Caught | 180 | 30 | 102 | 31 |
| TI 2I | D | Voltrob | 14/03/2023 | Polinema | Electric | Caught | 109 | 21 | 111 | 37 |
| TI 2I | D | Surskit | 14/03/2023 | Polinema | Bug/Water | Caught | 93 | 20 | 87 | 32 |
| TI 2I | D | Staravia | 14/03/2023 | Polinema | Normal/Flying | Caught | 142 | 15 | 94 | 17 |
| TI 2I | D | Houndour | 14/03/2023 | Polinema | Dark/Fire | Caught | 152 | 12 | 83 | 15 |
| TI 2I | D | Mareanie | 14/03/2023 | Polinema | Poison/Water | Caught | 98 | 47 | 110 | 141 |
| TI 2I | D | Houndour | 14/03/2023 | Polinema | Dark/Fire | Caught | 152 | 36 | 83 | 115 |
| TI 2I | D | Sentret | 14/03/2023 | Polinema | Normal | Caught | 84 | 24 | 79 | 39 |
| TI 2I | D | Caterpie | 14/03/2023 | Polinema | Bug | Caught | 55 | 29 | 55 | 30 |
| TI 2I | D | Eevee | 14/03/2023 | Polinema | Normal | Caught | 104 | 13 | 114 | 14 |
| TI 2I | D | Surskit | 14/03/2023 | Polinema | Bug/Water | Caught | 93 | 42 | 87 | 122 |
| TI 2I | D | Bulbasaur | 14/03/2023 | Polinema | Grass/Poison | Caught | 118 | 12 | 111 | 14 |
| TI 2I | E | Charmander | 15/03/2023 | Polinema | Fire | Caught | 43 | 28 | 14 | 12 |
| TI 2I | E | Tranquil | 20/03/2023 | Polinema | Normal / Fly | Caught | 62 | 48 | 68 | 18 |
| TI 2I | E | Hitmontop | 17/03/2023 | Polinema | Fighter | Caught | 71 | 65 | 80 | 28 |
| TI 2I | E | Starly | 17/03/2023 | Polinema | Normal / Fly | Caught | 57 | 44 | 69 | 29 |
| TI 2I | E | Sewaddle | 18/03/2023 | Sulfat | Bug / leaf | Caught | 16 | 58 | 24 | 34 |
| TI 2I | E | Flareon | 17/03/2023 | Sulfat | Fire | Caught | 55 | 13 | 29 | 39 |
| TI 2I | E | Voltrob | 17/03/2023 | Sulfat | Electric | Caught | 44 | 28 | 67 | 40 |
| TI 2I | E | Popplio | 17/03/2023 | Dau | Water | Caught | 14 | 34 | 62 | 48 |
| TI 2I | E | Vulpix | 17/03/2023 | Dau | Fire | Caught | 56 | 43 | 46 | 51 |
| TI 2I | E | Aaron | 20/03/2023 | Suhat | Steel/Rock | Caught | 26 | 30 | 73 | 52 |
| TI 2I | E | Tranquill | 17/03/2023 | Suhat | Normal / Fly | Caught | 68 | 30 | 57 | 54 |
| TI 2I | E | Bidoof | 17/03/2023 | Suhat | Normal | Caught | 19 | 96 | 55 | 66 |
| TI 2I | E | Pidove | 17/03/2023 | Suhat | Normal / Fly | Caught | 39 | 84 | 16 | 71 |
| TI 2I | E | Kricketot | 17/03/2023 | Suhat | Bug | Caught | 93 | 13 | 19 | 75 |
| TI 2I | E | Lillipup | 17/03/2023 | Sulfat | Normal | Caught | 52 | 74 | 12 | 77 |
| TI 2I | E | Kricketot | 20/03/2023 | Polinema | Bug | Caught | 37 | 15 | 62 | 78 |
| TI 2I | E | Ekans | 17/03/2023 | Polinema | Poison | Caught | 25 | 43 | 19 | 81 |
| TI 2I | E | Grubbin | 17/03/2023 | Dau | Bug | Caught | 13 | 49 | 17 | 95 |
| TI 2I | E | Deerling | 17/03/2023 | Polinema | Normal / Grass | Caught | 14 | 46 | 27 | 111 |
| TI 2I | E | Cuterpie | 20/03/2023 | Dau | Bug | Caught | 13 | 72 | 57 | 115 |
| TI 2I | E | Cyndaquil | 17/03/2023 | Polinema | Fire | Caught | 55 | 26 | 77 | 120 |
| TI 2I | E | Chinchou | 18/03/2023 | Polinema | Water / Electric | Caught | 27 | 41 | 92 | 135 |
| TI 2I | E | Froakie | 18/03/2023 | Polinema | Water | Caught | 94 | 17 | 22 | 140 |
| TI 2I | E | Deerling | 17/03/2023 | Dau | Normal / Grass | Caught | 79 | 59 | 19 | 144 |
| TI 2I | E | Lillipup | 20/03/2023 | Suhat | Normal | Caught | 15 | 70 | 56 | 154 |
| TI 2I | E | Lillipup | 20/03/2023 | Dau | Normal | Caught | 15 | 34 | 72 | 163 |
| TI 2I | E | Patrat | 20/03/2023 | Polinema | Normal | Caught | 74 | 24 | 97 | 177 |
| TI 2I | E | Oddish | 17/03/2023 | Polinema | Leaf / Poison | Caught | 62 | 29 | 29 | 213 |
| TI 2I | E | Chikorita | 20/03/2023 | Sulfat | Leaf | Caught | 17 | 29 | 95 | 189 |
| TI 2I | E | Mareanie | 18/03/2023 | Dau | Poison / Water | Caught | 31 | 51 | 67 | 195 |
| TI 2I | E | Chinchou | 18/03/2023 | Sulfat | Water / Electric | Caught | 74 | 92 | 19 | 225 |
| TI 2I | E | Pidove | 18/03/2023 | Dau | Normal / Fly | Caught | 26 | 76 | 74 | 228 |
| TI 2I | E | Fletchling | 18/03/2023 | Suhat | Normal / Fly | Caught | 13 | 24 | 97 | 231 |
| TI 2I | E | Oddish | 17/03/2023 | Suhat | Leaf / Poison | Caught | 21 | 93 | 32 | 234 |
| TI 2I | E | Exeggcute | 20/03/2023 | Sulfat | Leaf / Psychic | Caught | 39 | 27 | 77 | 254 |
| TI 2I | E | Corsola | 17/03/2023 | Sulfat | Water / Rock | Caught | 38 | 22 | 99 | 255 |
| TI 2I | E | Sawk | 18/03/2023 | Sulfat | Fighter | Caught | 74 | 88 | 14 | 270 |
| TI 2I | E | Doduo | 20/03/2023 | Suhat | Normal / Fly | Caught | 43 | 60 | 72 | 274 |
| TI 2I | E | Popplio | 20/03/2023 | Suhat | Water | Caught | 52 | 91 | 33 | 278 |
| TI 2I | E | Ekans | 20/03/2023 | Sulfat | Poison | Caught | 93 | 15 | 64 | 303 |
| TI 2I | E | Ekans | 17/03/2023 | Sulfat | Poison | Flee | 35 | 33 | 93 | 255 |
| TI 2I | E | Ekans | 17/03/2023 | Sulfat | Poison | Flee | 66 | 50 | 75 | 275 |
| TI 2I | E | Oddish | 17/03/2023 | Polinema | Leaf / Poison | Flee | 95 | 42 | 25 | 156 |
| TI 2I | E | Mareanie | 18/03/2023 | Polinema | Poison / Water | Flee | 39 | 43 | 98 | 195 |
| TI 2I | E | Tentacool | 18/03/2023 |  | Poison / Water | Caught | 171 | 13 | 39 | 342 |
| TI 2I | E | Lairon | 20/03/2023 |  | Steel/Rock | Caught | 139 | 59 | 181 | 428 |
| TI 2I | E | Hitmontop | 17/03/2023 |  | Fighter | Caught | 67 | 24 | 94 | 512 |
| TI 2I | F | Lairon | 18/03/2023 | Polinema | Steel/Rock | Caught | 158 | 42 | 196 | 193 |
| TI 2I | F | Pikachu | 18/03/2023 | Polinema | Electric | Caught | 112 | 25 | 96 | 64 |
| TI 2I | F | Panpour | 15/03/2023 | Univ Brawijaya | Water | Caught | 104 | 24 | 94 | 38 |
| TI 2I | F | Aron | 15/03/2023 | Univ Brawijaya | Steel/Rock | Caught | 121 | 38 | 141 | 117 |
| TI 2I | F | Zubat | 15/03/2023 | Rampal | Poison/Flying | Caught | 83 | 50 | 73 | 160 |
| TI 2I | F | Froakie | 15/03/2023 | Rampal | Water | Caught | 122 | 34 | 84 | 101 |
| TI 2I | F | Tepig | 15/03/2023 | Rampal | Fire | Caught | 115 | 35 | 85 | 71 |
| TI 2I | F | Eevee | 15/03/2023 | Rampal | Normal | Caught | 104 | 46 | 114 | 129 |
| TI 2I | F | Elgyem | 15/03/2023 | Araya | Psychic | Caught | 148 | 60 | 100 | 334 |
| TI 2I | F | Snivy | 15/03/2023 | Araya | Grass | Caught | 88 | 12 | 107 | 10 |
| TI 2I | F | Wooper | 15/03/2023 | Araya | Water/Ground | Caught | 75 | 14 | 66 | 10 |
| TI 2I | F | Bergmite | 15/03/2023 | Araya | Ice | Caught | 117 | 32 | 120 | 80 |
| TI 2I | F | Voltorb | 15/03/2023 | Araya | Electric | Caught | 109 | 34 | 111 | 110 |
| TI 2I | F | Karrablast | 15/03/2023 | Araya | Dark | Caught | 137 | 24 | 87 | 48 |
| TI 2I | F | Ekans | 15/03/2023 | Sawojajar | Poison | Caught | 110 | 33 | 90 | 109 |
| TI 2I | F | Drifblim | 15/03/2023 | Sawojajar | Ghost/Flying | Caught | 180 | 119 | 102 | 508 |
| TI 2I | F | Meowth | 15/03/2023 | Sawojajar | Normal | Caught | 92 | 44 | 78 | 118 |
| TI 2I | F | Venonat | 15/03/2023 | Sawojajar | Bug/Poison | Caught | 100 | 47 | 100 | 108 |
| TI 2I | F | Venipede | 15/03/2023 | Sawojajar | Bug/Poison | Caught | 83 | 31 | 99 | 84 |
| TI 2I | F | Clauncher | 15/03/2023 | Sawojajar | Water | Caught | 108 | 29 | 117 | 66 |
| TI 2I | F | Tympole | 15/03/2023 | Klojen | Water | Caught | 98 | 30 | 76 | 50 |
| TI 2I | F | Dunsparce | 15/03/2023 | Klojen | Normal | Caught | 131 | 60 | 128 | 172 |
| TI 2I | F | Oshawott | 15/03/2023 | Klojen | Water | Caught | 117 | 34 | 85 | 70 |
| TI 2I | F | Ferroseed | 15/03/2023 | Klojen | Grass/Steel | Caught | 82 | 29 | 155 | 62 |
| TI 2I | F | Blitzle | 15/03/2023 | Pakis | Electric | Caught | 118 | 35 | 64 | 89 |
| TI 2I | F | Ralts | 15/03/2023 | Pakis | Psychic/Fairy | Caught | 79 | 54 | 59 | 177 |
| TI 2I | F | Togedemaru | 15/03/2023 | Pakis | Electric/Steel | Caught | 190 | 57 | 145 | 370 |
| TI 2I | F | Lunatone | 15/03/2023 | Pakis | Rock/Psychic | Caught | 178 | 19 | 153 | 30 |
| TI 2I | F | Foongus | 15/03/2023 | Pakis | Grass/Poison | Caught | 97 | 77 | 91 | 289 |
| TI 2I | F | Wimpod | 15/03/2023 | Pakis | Bug/Water | Caught | 67 | 39 | 74 | 114 |
| TI 2I | F | Poliwag | 15/03/2023 | Batu | Water | Caught | 101 | 34 | 82 | 98 |
| TI 2I | F | Pikachu | 15/03/2023 | Batu | Electric | Caught | 112 | 47 | 96 | 211 |
| TI 2I | F | Vulpix | 15/03/2023 | Batu | Fire | Caught | 96 | 11 | 109 | 10 |
| TI 2I | F | Seel | 15/03/2023 | Batu | Water | Caught | 85 | 54 | 121 | 136 |
| TI 2I | F | Yungoos | 15/03/2023 | Batu | Normal | Caught | 122 | 24 | 56 | 37 |
| TI 2I | F | Ekans | 15/03/2023 | Batu | Poison | Caught | 110 | 10 | 90 | 11 |
| TI 2I | F | Squirtle | 15/03/2023 | Batu | Water | Caught | 94 | 12 | 121 | 12 |
| TI 2I | F | Arbok | 15/03/2023 | Araya | Poison | Flee | 205 | 65 | 23 | 43 |
| TI 2I | F | Ekans | 15/03/2023 | Araya | Poison | Flee | 158 | 35 | 87 | 56 |
| TI 2I | F | Arbok | 15/03/2023 | Sawojajar | Poison | Flee | 106 | 87 | 43 | 23 |

1. A. Mean = 49,81404 = 49,814

Variance = 736,6286

Standard Deviation = 27,1409 = 27,141

B. Q1 = 29

Q2 = 45

Q3 = 65

IQR = 36

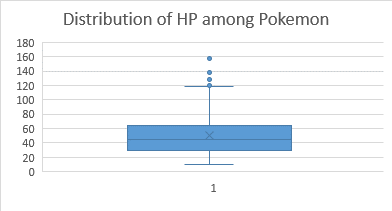
Upper Fence = 119

Lower Fence = -25

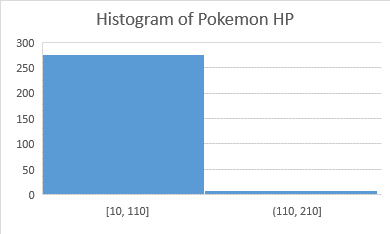
C. Based on the obtained data from point b, yes, there are some outliers, they are:

|  |
| --- |
| 1. Ninetales (hp=121) |
| 2. Furfrou (hp=128) |
| 3. Throh (hp=157) |
| 4. Masquerain (hp=121) |
| 5. Togedemaru (hp=120) |
| 6. Weedle (hp=120) |
| 7. Tranquill (hp=138) |

1. A. Boxplot of HP



B. Histogram of HP



1. A. Z-score of Pokemon

|  |  |
| --- | --- |
| Mean of cp = | 228,4421 |
| Standard Deviation of cp = | 274,9121 |

|  |  |  |  |
| --- | --- | --- | --- |
| Pokemon | def | cp | z-score |
| Flaeron | 179 | 1648 | FALSE |
| Ninetales | 190 | 1461 | FALSE |
| Furfrou | 167 | 1403 | FALSE |
| Throh | 160 | 1288 | FALSE |
| Heracross | 179 | 1243 | FALSE |
| Oddish | 112 | 14 | -0,780037103 |
| Arbok | 153 | 1204 | FALSE |
| Feraligatr | 188 | 287 | 0,213015169 |
| Lairon | 198 | 80 | -0,539958532 |
| Chinchou | 97 | 485 | FALSE |
| Tranquill | 107 | 173 | -0,201666 |
| Ledyba | 118 | 251 | 0,082063221 |
| Masquerain | 150 | 1533 | FALSE |
| Togedemaru | 145 | 1595 | FALSE |
| Pidove | 80 | 268 | 0,143901641 |
| Surskit | 87 | 382 | 0,558582809 |
| Surskit | 87 | 519 | FALSE |
| Pidove | 80 | 104 | -0,452657233 |
| Tranquill | 97 | 173 | -0,201666 |
| Pikachu | 96 | 111 | -0,427194355 |
| Grubbin | 45 | 769 | FALSE |
| Tynamo | 40 | 423 | FALSE |
| Pidove | 50 | 586 | FALSE |
| Stufful | 50 | 378 | 0,544032592 |
| Magikarp | 8 | 92 | -0,496307883 |
| Masquearin | 62 | 881 | FALSE |
| Karrablast | 45 | 376 | 0,536757484 |
| Surskit | 30 | 186 | -0,154377796 |
| Yanma | 45 | 576 | FALSE |
| Surskit | 30 | 405 | FALSE |
| Cyndaquil | 60 | 59 | -0,616347168 |
| Typhlosion | 85 | 775 | FALSE |
| Grubbin | 45 | 578 | FALSE |
| Vulpix | 65 | 309 | 0,293041359 |
| Lillipup | 45 | 574 | FALSE |
| Surskit | 60 | 468 | FALSE |
| Doduo | 50 | 871 | FALSE |
| Aron | 77 | 879 | FALSE |
| Tynamo | 66 | 423 | FALSE |
| Grubbin | 54 | 769 | FALSE |
| Ledyba | 30 | 544 | FALSE |
| Surskit | 60 | 199 | -0,107089593 |
| Caterpie | 55 | 102 | -0,459932341 |
| Sandshrew | 120 | 773 | FALSE |
| Lillipup | 45 | 57 | -0,623622276 |
| Doduo | 50 | 874 | FALSE |
| Slugma | 71 | 445 | FALSE |
| Surskit | 60 | 170 | -0,212578662 |
| Aron | 141 | 81 | -0,536320978 |
| Caterpie | 55 | 43 | -0,674548034 |
| Shelmet | 140 | 76 | -0,554508748 |
| Clauncher | 117 | 131 | -0,354443272 |
| Starly | 58 | 10 | -0,794587319 |
| Ledyba | 118 | 10 | -0,794587319 |
| Patrat | 73 | 189 | -0,143465134 |
| Caterpie | 55 | 68 | -0,583609181 |
| Starly | 58 | 124 | -0,379906151 |
| Zubat | 73 | 85 | -0,521770761 |
| Magikarp | 85 | 108 | -0,438107017 |
| Shroomish | 110 | 54 | -0,634534939 |
| Ledyba | 118 | 193 | -0,128914918 |
| Pidove | 80 | 10 | -0,794587319 |
| Tynamo | 78 | 268 | 0,143901641 |
| Lillipup | 86 | 12 | -0,787312211 |
| Hoppip | 94 | 98 | -0,474482558 |
| Caterpie | 55 | 25 | -0,740024008 |
| Cyndaquil | 93 | 166 | -0,227128879 |
| Starly | 58 | 113 | -0,419919246 |
| Tranquill | 107 | 243 | 0,052962788 |
| Charmander | 93 | 12 | -0,787312211 |
| Burmy | 83 | 71 | -0,572696519 |
| Lillipup | 86 | 34 | -0,707286021 |
| Hoppip | 94 | 35 | -0,703648467 |
| Hoppip | 94 | 70 | -0,576334073 |
| Tynamo | 78 | 137 | -0,332617948 |
| Cyndaquil | 93 | 116 | -0,409006584 |
| Starly | 58 | 65 | -0,594521844 |
| Shroomish | 110 | 10 | -0,794587319 |
| Castform | 139 | 393 | 0,598595904 |
| Weedle | 50 | 87 | -0,514495653 |
| Solrock | 153 | 543 | FALSE |
| Starly | 58 | 268 | 0,143901641 |
| Purrloin | 73 | 28 | -0,729111346 |
| Tynamo | 78 | 147 | -0,296242407 |
| Lillipup | 86 | 12 | -0,787312211 |
| Bunnelby | 72 | 33 | -0,710923575 |
| Froakie | 84 | 37 | -0,696373359 |
| Weedle | 50 | 108 | -0,438107017 |
| Pidove | 80 | 170 | -0,212578662 |
| Pidove | 80 | 205 | -0,085264268 |
| Ledyba | 118 | 152 | -0,278054636 |
| Stufful | 95 | 367 | 0,504019497 |
| Pidove | 80 | 155 | -0,267141974 |
| Weedle | 50 | 105 | -0,449019679 |
| Chinchou | 97 | 163 | -0,238041541 |
| Tranquill | 107 | 96 | -0,481757666 |
| Patrat | 73 | 167 | -0,223491324 |
| Ledyba | 118 | 66 | -0,590884289 |
| Togedemaru | 145 | 90 | -0,503582991 |
| Sentret | 73 | 39 | -0,68909825 |
| Sunkern | 55 | 21 | -0,754574224 |
| Grubbin | 85 | 160 | -0,248954203 |
| Sandslash | 175 | 541 | FALSE |
| Tynamo | 78 | 251 | 0,082063221 |
| Ekans | 97 | 230 | 0,005674584 |
| Weedle | 60 | 243 | 0,052962788 |
| Bulbasaur | 49 | 14 | -0,780037103 |
| Caterpie | 79 | 60 | -0,612709614 |
| pikachu | 87 | 189 | -0,143465134 |
| diglett | 82 | 101 | -0,463569896 |
| drownzee | 123 | 279 | 0,183914736 |
| Voltrob | 50 | 414 | FALSE |
| Hitmonlee | 109 | 390 | 0,587683242 |
| Magikarp | 85 | 10 | -0,794587319 |
| Eevee | 48 | 288 | 0,216652723 |
| Hoothoot | 59 | 187 | -0,150740242 |
| Starly | 101 | 36 | -0,700010913 |
| Nosepass | 103 | 21 | -0,754574224 |
| Hoppip | 99 | 82 | -0,532683424 |
| Teddiursa | 110 | 204 | -0,088901822 |
| Slugma | 115 | 153 | -0,274417082 |
| Houndour | 98 | 487 | FALSE |
| Himontop | 43 | 394 | 0,602233458 |
| Nosepass | 42 | 325 | 0,351242225 |
| Volbeat | 30 | 268 | 0,143901641 |
| Castform | 90 | 221 | -0,027063403 |
| Starly | 32 | 444 | FALSE |
| Glameow | 46 | 242 | 0,049325234 |
| Bidoof | 37 | 520 | FALSE |
| Buneary | 33 | 323 | 0,343967117 |
| Snower | 31 | 749 | FALSE |
| Oshawott | 41 | 77 | -0,550871194 |
| Patrat | 90 | 185 | -0,15801535 |
| Lillipup | 114 | 57 | -0,623622276 |
| Purrloin | 103 | 420 | FALSE |
| Pansear | 77 | 365 | 0,496744389 |
| Pidove | 37 | 371 | 0,518569714 |
| Tranquill | 52 | 1030 | FALSE |
| Roggenrola | 67 | 38 | -0,692735804 |
| Drilbur | 54 | 425 | FALSE |
| Purrloin | 111 | 314 | 0,31122913 |
| Vanipeda | 40 | 98 | -0,474482558 |
| pikachu | 31 | 425 | FALSE |
| diglett | 112 | 314 | 0,31122913 |
| Drowzee | 57 | 98 | -0,474482558 |
| Voltrob | 95 | 236 | 0,027499909 |
| Hitmonlee | 69 | 198 | -0,110727147 |
| Teddiursa | 93 | 251 | 0,082063221 |
| Chinchou | 97 | 333 | 0,380342658 |
| Yungoos | 56 | 157 | -0,259866866 |
| Weedle | 56 | 72 | -0,569058965 |
| Froakie | 84 | 340 | 0,405805536 |
| Ekans | 97 | 11 | -0,790949765 |
| Oddish | 112 | 190 | -0,13982758 |
| Stunky | 90 | 45 | -0,667272926 |
| Gastly | 67 | 289 | 0,220290277 |
| Stufful | 95 | 17 | -0,769124441 |
| Duoduo | 83 | 217 | -0,041613619 |
| Pidove | 80 | 217 | -0,041613619 |
| Voltrob | 111 | 326 | 0,354879779 |
| Oddish | 112 | 153 | -0,274417082 |
| Purrloin | 73 | 124 | -0,379906151 |
| Zubat | 73 | 228 | -0,001600524 |
| Tympole | 78 | 92 | -0,496307883 |
| Chinchou | 97 | 104 | -0,452657233 |
| Froakie | 84 | 173 | -0,201666 |
| Glameow | 82 | 125 | -0,376268597 |
| Pansage | 94 | 95 | -0,48539522 |
| Glameow | 82 | 11 | -0,790949765 |
| Magikarp | 85 | 40 | -0,685460696 |
| Karrablast | 87 | 108 | -0,438107017 |
| Aron | 141 | 251 | 0,082063221 |
| Starly | 58 | 141 | -0,318067731 |
| Caterpie | 55 | 75 | -0,558146302 |
| Surskit | 87 | 142 | -0,314430177 |
| Primeape | 138 | 280 | 0,18755229 |
| Ledyba | 118 | 73 | -0,565421411 |
| Solrock | 153 | 350 | 0,442181077 |
| Ekans | 97 | 164 | -0,234403987 |
| Patrat | 73 | 231 | 0,009312139 |
| Hoppip | 94 | 29 | -0,725473791 |
| Teddiursa | 93 | 203 | -0,092539377 |
| Bunnelby | 72 | 62 | -0,605434506 |
| Vulpix | 109 | 102 | -0,459932341 |
| Foongus | 91 | 166 | -0,227128879 |
| Zubat | 73 | 126 | -0,372631043 |
| Drifblim | 102 | 31 | -0,718198683 |
| Voltrob | 111 | 37 | -0,696373359 |
| Surskit | 87 | 32 | -0,714561129 |
| Staravia | 94 | 17 | -0,769124441 |
| Houndour | 83 | 15 | -0,776399549 |
| Mareanie | 110 | 141 | -0,318067731 |
| Houndour | 83 | 115 | -0,412644138 |
| Sentret | 79 | 39 | -0,68909825 |
| Caterpie | 55 | 30 | -0,721836237 |
| Eevee | 114 | 14 | -0,780037103 |
| Surskit | 87 | 122 | -0,387181259 |
| Bulbasaur | 111 | 14 | -0,780037103 |
| Charmander | 14 | 12 | -0,787312211 |
| Tranquil | 68 | 18 | -0,765486887 |
| Hitmontop | 80 | 28 | -0,729111346 |
| Starly | 69 | 29 | -0,725473791 |
| Sewaddle | 24 | 34 | -0,707286021 |
| Flareon | 29 | 39 | -0,68909825 |
| Voltrob | 67 | 40 | -0,685460696 |
| Popplio | 62 | 48 | -0,656360263 |
| Vulpix | 46 | 51 | -0,645447601 |
| Aaron | 73 | 52 | -0,641810047 |
| Tranquill | 57 | 54 | -0,634534939 |
| Bidoof | 55 | 66 | -0,590884289 |
| Pidove | 16 | 71 | -0,572696519 |
| Kricketot | 19 | 75 | -0,558146302 |
| Lillipup | 12 | 77 | -0,550871194 |
| Kricketot | 62 | 78 | -0,54723364 |
| Ekans | 19 | 81 | -0,536320978 |
| Grubbin | 17 | 95 | -0,48539522 |
| Deerling | 27 | 111 | -0,427194355 |
| Cuterpie | 57 | 115 | -0,412644138 |
| Cyndaquil | 77 | 120 | -0,394456368 |
| Chinchou | 92 | 135 | -0,339893056 |
| Froakie | 22 | 140 | -0,321705285 |
| Deerling | 19 | 144 | -0,307155069 |
| Lillipup | 56 | 154 | -0,270779528 |
| Lillipup | 72 | 163 | -0,238041541 |
| Patrat | 97 | 177 | -0,187115783 |
| Oddish | 29 | 213 | -0,056163835 |
| Chikorita | 95 | 189 | -0,143465134 |
| Mareanie | 67 | 195 | -0,121639809 |
| Chinchou | 19 | 225 | -0,012513186 |
| Pidove | 74 | 228 | -0,001600524 |
| Fletchling | 97 | 231 | 0,009312139 |
| Oddish | 32 | 234 | 0,020224801 |
| Exeggcute | 77 | 254 | 0,092975883 |
| Corsola | 99 | 255 | 0,096613437 |
| Sawk | 14 | 270 | 0,151176749 |
| Doduo | 72 | 274 | 0,165726965 |
| Popplio | 33 | 278 | 0,180277182 |
| Ekans | 64 | 303 | 0,271216034 |
| Ekans | 93 | 255 | 0,096613437 |
| Ekans | 75 | 275 | 0,169364519 |
| Oddish | 25 | 156 | -0,26350442 |
| Mareanie | 98 | 195 | -0,121639809 |
| Tentacool | 39 | 342 | 0,413080645 |
| Lairon | 181 | 428 | FALSE |
| Hitmontop | 94 | 512 | FALSE |
| Lairon | 196 | 193 | -0,128914918 |
| Pikachu | 96 | 64 | -0,598159398 |
| Panpour | 94 | 38 | -0,692735804 |
| Aron | 141 | 117 | -0,40536903 |
| Zubat | 73 | 160 | -0,248954203 |
| Froakie | 84 | 101 | -0,463569896 |
| Tepig | 85 | 71 | -0,572696519 |
| Eevee | 114 | 129 | -0,361718381 |
| Elgyem | 100 | 334 | 0,383980212 |
| Snivy | 107 | 10 | -0,794587319 |
| Wooper | 66 | 10 | -0,794587319 |
| Bergmite | 120 | 80 | -0,539958532 |
| Voltorb | 111 | 110 | -0,430831909 |
| Karrablast | 87 | 48 | -0,656360263 |
| Ekans | 90 | 109 | -0,434469463 |
| Drifblim | 102 | 508 | FALSE |
| Meowth | 78 | 118 | -0,401731476 |
| Venonat | 100 | 108 | -0,438107017 |
| Venipede | 99 | 84 | -0,525408315 |
| Clauncher | 117 | 66 | -0,590884289 |
| Tympole | 76 | 50 | -0,649085155 |
| Dunsparce | 128 | 172 | -0,205303554 |
| Oshawott | 85 | 70 | -0,576334073 |
| Ferroseed | 155 | 62 | -0,605434506 |
| Blitzle | 64 | 89 | -0,507220545 |
| Ralts | 59 | 177 | -0,187115783 |
| Togedemaru | 145 | 370 | 0,51493216 |
| Lunatone | 153 | 30 | -0,721836237 |
| Foongus | 91 | 289 | 0,220290277 |
| Wimpod | 74 | 114 | -0,416281692 |
| Poliwag | 82 | 98 | -0,474482558 |
| Pikachu | 96 | 211 | -0,063438944 |
| Vulpix | 109 | 10 | -0,794587319 |
| Seel | 121 | 136 | -0,336255502 |
| Yungoos | 56 | 37 | -0,696373359 |
| Ekans | 90 | 11 | -0,790949765 |
| Squirtle | 121 | 12 | -0,787312211 |
| Arbok | 23 | 43 | -0,674548034 |
| Ekans | 87 | 56 | -0,62725983 |
| Arbok | 43 | 23 | -0,747299116 |

B. Number of Pokemons which has DEF > 60 = 200

Total Pokemon = 285

P (X) = 200/285 = 0,701754

1. A. Number of caught Pokemon = 274

Number of fleeing Pokemon = 11

Total Pokemon = 285

Probability of caught = 0,961404

Probability of flee = 0,038596

B. Number of caught Pokemon = 274

Number of electric Pokemon = 31

Probability of catching electric Pokemon = 0,108772

Probability of catching 3 electric Pokemon in 10 trials = 0,068969

C. Caught Pokemon in Polinema

|  |  |
| --- | --- |
| Pokemon | Frequency |
| Shelmet | 1 |
| Clauncher | 1 |
| Starly | 5 |
| Ledyba | 4 |
| Patrat | 3 |
| Caterpie | 4 |
| Zubat | 3 |
| Magikarp | 2 |
| Shroomish | 1 |
| Pidove | 4 |
| Tynamo | 2 |
| Lillipup | 2 |
| Hoppip | 3 |
| Castform | 2 |
| Weedle | 3 |
| Solrock | 2 |
| Purrloin | 2 |
| Bunnelby | 2 |
| Froakie | 4 |
| Stufful | 2 |
| Bulbasaur | 2 |
| pikachu | 2 |
| diglett | 1 |
| Teddiursa | 3 |
| Slugma | 1 |
| Houndour | 3 |
| Himontop | 1 |
| Nosepass | 1 |
| Volbeat | 1 |
| Chinchou | 3 |
| Yungoos | 1 |
| Ekans | 3 |
| Oddish | 3 |
| Stunky | 1 |
| Gastly | 1 |
| Duoduo | 1 |
| Voltrob | 2 |
| Tympole | 1 |
| Glameow | 2 |
| Pansage | 1 |
| Karrablast | 1 |
| Aron | 1 |
| Surskit | 3 |
| Primeape | 1 |
| Vulpix | 1 |
| Foongus | 1 |
| Drifblim | 1 |
| Staravia | 1 |
| Mareanie | 1 |
| Sentret | 1 |
| Eevee | 1 |
| Charmander | 1 |
| Tranquil | 1 |
| Hitmontop | 2 |
| Kricketot | 1 |
| Deerling | 1 |
| Cyndaquil | 1 |
| Tentacool | 1 |
| Lairon | 2 |

