fml-811258364

2023-09-10

#part 1- importing the data #The source of the data set:https://www.kaggle.com/datasets/sidtwr/videogames-sales-dataset (https://www.kaggle.com/datasets/sidtwr/videogames-sales-dataset)

```
a<-read.csv("C:/Users/LENOVO/Downloads/PS4_GamesSales.csv")
a
```

```
##                                                                Game
## 1                                               Grand Theft Auto V
## 2                                        Call of Duty: Black Ops 3
## 3                                           Red Dead Redemption 2
## 4                                              Call of Duty: WWII
## 5                                                        FIFA 18
## 6                                                        FIFA 17
## 7                                                 Uncharted (PS4)
## 8                                                 Spider-Man (PS4)
## 9                                     Call of Duty: Infinite Warfare
## 10                                                       Fallout 4
## 11                                                       FIFA 16
## 12                                        Star Wars Battlefront 2015
## 13                                     Call of Duty: Advanced Warfare
## 14                                                   Battlefield 1
## 15                                                 The Last of Us
## 16                                                       MineCraft
## 17                                                       FIFA 15
## 18                                                 God of War (PS4)
## 19                                              Horizon: Zero Dawn
## 20                                                         Destiny
## 21                             Uncharted: The Nathan Drake Collection
## 22                                        The Witcher 3: Wild Hunt
## 23                                                Final Fantasy XV
## 24                                     Crash Bandicoot N. Sane Trilogy
## 25                                          Monster Hunter: World
## 26                                                       Overwatch
## 27                                     Star Wars Battlefront II (2017)
## 28                                      Tom Clancy's The Division
## 29                                   Tom Clancy's Rainbow Six: Siege
## 30                                                      Watch Dogs
## 31                                             Call of Duty: Ghosts
## 32                                          Assassin's Creed: Unity
## 33                                                       Destiny 2
## 34                                           Batman: Arkham Knight
## 35                                         Assassin's Creed Origins
## 36                                                       Far Cry 4
## 37                                                       NBA 2K16
## 38                                                       Far Cry 5
## 39                                                   Battlefield 4
## 40                                              Gran Turismo Sport
## 41                                        Assassin's Creed Syndicate
## 42                                                       NBA 2K17
## 43                                                 Mortal Kombat X
## 44                                                 FIFA Soccer 14
## 45                                        The Elder Scrolls V: Skyrim
## 46                                                    Watch Dogs 2
## 47                                                       NBA 2K18
## 48                                        Resident Evil VII: Biohazard
## 49                                                 Madden NFL 16
## 50                                                 Madden NFL 17
## 51                                    Middle-Earth: Shadow of Mordor
## 52                                      Assassin's Creed IV: Black Flag
## 53                                 Tom Clancy's Ghost Recon Wildlands
## 54                                                      Bloodborne
```

```
## 55                       Metal Gear Solid V: The Phantom Pain
## 56                                    Killzone: Shadow Fall
## 57                                    inFAMOUS: Second Son
## 58                                         Doom (2016)
## 59                                           Mafia III
## 60                                          Diablo III
## 61                                     Far Cry: Primal
## 62                                 Need for Speed (2015)
## 63                                       Madden NFL 18
## 64                                           NBA 2K15
## 65                                         Dying Light
## 66                                      Dark Souls III
## 67                               Ratchet & Clank (2016)
## 68                                           DriveClub
## 69                             Uncharted: The Lost Legacy
## 70                             Dragon Age III: Inquisition
## 71                                       No Man's Sky
## 72                                       Madden NFL 15
## 73                             Need for Speed: Payback
## 74                             Destiny: The Taken King
## 75                               Need for Speed Rivals
## 76                                PlayStation VR Worlds
## 77                                Battlefield: Hardline
## 78                             Rise of the Tomb Raider
## 79                                    LittleBigPlanet 3
## 80                             The Elder Scrolls Online
## 81                             Middle-Earth: Shadow of War
## 82                                   Dragon Quest XI
## 83                                       Rocket League
## 84                                       Just Cause 3
## 85                                        Dishonored 2
## 86                             Lego Marvel Super Heroes
## 87                                         Until Dawn
## 88                                             Knack
## 89                                   The Evil Within
## 90                                           The Crew
## 91                             Kingdom Hearts 1.5 + 2.5 Remix
## 92                                         For Honor
## 93                                        Titanfall 2
## 94                                        Injustice 2
## 95                                     NieR Automata
## 96                                         Tekken 7
## 97                                         Persona 5
## 98                                     The Order: 1886
## 99                             Wolfenstein: The New Order
## 100                             Detroit: Become Human
## 101                   Naruto Shippuden: Ultimate Ninja Storm 4
## 102                                           NBA 2K14
## 103                                   Tomb Raider (2013)
## 104                              Dragon Ball: Xenoverse 2
## 105                                     Rayman Legends
## 106                              Mass Effect: Andromeda
## 107                              Dragon Ball Fighter Z
## 108                   South Park: The Fractured But Whole
## 109                                         The Sims 4
## 110                                   Street Fighter V
```

```
## 111                                            Wolfenstein II: The New Colossus
## 112                                                              WWE 2K18
## 113                                         Lego Star Wars: The Force Awakens
## 114                                                           EA Sports UFC 2
## 115                                                         The Last Guardian
## 116                                                              WWE 2K16
## 117                                     Borderlands: The Handsome Collection
## 118                                                           Project CARS
## 119                                                              WWE 2K17
## 120                                                       Guitar Hero Live
## 121                                         Metal Gear Solid: Ground Zeroes
## 122                                                         Mad Max (2013)
## 123                                                 Shadow of the Colossus
## 124                         Kingdom Hearts HD 2.8 Final Chapter Prologue
## 125                                                   Dragon Ball: XenoVerse
## 126                                                         LEGO Dimensions
## 127                                                     LEGO Jurassic World
## 128                                                              WWE 2K15
## 129                                                     MLB The Show 17
## 130                                                           LEGO Worlds
## 131                                         The Elder Scrolls V: Skyrim PSVR
## 132                                             LEGO Marvel Super Heroes 2
## 133                                                           EA Sports UFC
## 134                                         Final Fantasy XII: The Zodiac Age
## 135                                                       Alien: Isolation
## 136                                                     MLB The Show 18
## 137                                                     The Evil Within II
## 138                                                           Prey (2017)
## 139                                                   Final Fantasy Type-0
## 140                                                                  Ni-Oh
## 141                                                     MLB 15: The Show
## 142                                                                  Steep
## 143                                                 LEGO Marvel's Avengers
## 144                                                                 Evolve
## 145                                                 Injustice: Gods Among Us
## 146                                                           EA Sports UFC 3
## 147                                                         Madden NFL 25
## 148                                                     MLB 16: The Show
## 149                                             Lego Batman 3: Beyond Gotham
## 150                                         Final Fantasy X/X-2 HD Remaster
## 151                                         Ni no Kuni II: Revenant Kingdom
## 152                                                         God of War III
## 153                                                               Fortnite
## 154                                             LEGO Harry Potter Collection
## 155                                                   Minecraft: Story Mode
## 156                                                 BioShock The Collection
## 157                                                                 Thief 4
## 158                                             Until Dawn: Rush of Blood
## 159                                                     Disney Infinity 3.0
## 160                                                     Farming Simulator 17
## 161                                                           The Crew 2
## 162                                                 Pro Evolution Soccer 2016
## 163                                                     ARK: Survival Evolved
## 164             Dragon Quest Heroes: The World's Tree Woe and the Blight Below
## 165                                         Assassin's Creed The Ezio Collection
## 166                                         Final Fantasy XIV: A Realm Reborn
```

```
## 167                              Destiny: The Collection
## 168                               F1 2016 (Codemasters)
## 169                                       Hitman (2016)
## 170                            Pro Evolution Soccer 2015
## 171                              LEGO City Undercover
## 172                            Pro Evolution Soccer 2018
## 173          Disney Infinity 2.0: Marvel Super Heroes
## 174                            Pro Evolution Soccer 2017
## 175                                       Sniper Elite 3
## 176                                    MLB 14 The Show
## 177                             WipEout Omega Collection
## 178                             Deus Ex: Mankind Divided
## 179                            The LEGO Movie Videogame
## 180                           Marvel vs. Capcom: Infinite
## 181                                       Dark Souls II
## 182                                             Yakuza 6
## 183                                             F1 2015
## 184                                          METRO 2033
## 185                                       Rocksmith 2014
## 186                                              NHL 16
## 187                    Plants vs Zombies: Garden Warfare
## 188                                    Tales of Berseria
## 189                     Yakuza Zero: The Place of Oath
## 190                           One Piece: Burning Blood
## 191                            Batman: Return to Arkham
## 192                Plants vs. Zombies: Garden Warfare 2
## 193                                    LEGO The Hobbit
## 194                               World of Final Fantasy
## 195                                             F1 2017
## 196                                              NHL 15
## 197                                  Knowledge is Power
## 198                                         L.A. Noire
## 199                                       Hidden Agenda
## 200          Call of Duty: Modern Warfare Remastered
## 201          Dragon Quest Builders: Revive Alefgard
## 202               The Lego Ninjago Movie Videogame
## 203                        Resident Evil: Revelations 2
## 204                                         Rock Band 4
## 205                                              NHL 18
## 206                                    Everybody's Golf
## 207                  The Amazing Spider-Man 2 (2014)
## 208                                            DOOM VFR
## 209                                        Sonic Forces
## 210                          Kingdom Come: Deliverance
## 211                                 Lords of the Fallen
## 212                                       Sniper Elite 4
## 213                               Rory McIlroy PGA Tour
## 214                                      Project CARS 2
## 215                              Skylanders: Trap Team
## 216                                              NHL 17
## 217                       One Piece: Pirate Warriors 3
## 218                                          DiRT Rally
## 219                         Homefront: The Revolution
## 220                             Attack on Titan (KOEI)
## 221                                              DiRT 4
## 222                                            Farpoint
```

```
## 223                                                            Battleborn
## 224                                                            A Way Out
## 225                                            Friday the 13th: The Game
## 226                          The Walking Dead: A Telltale Games Series
## 227                                            Wolfenstein: The Old Blood
## 228                                                             Deadpool
## 229       Dragon Quest Heroes II: Twin Kings and the Prophecy's End
## 230                                                     TrackMania Turbo
## 231                                                              Knack 2
## 232                                                      Just Dance 2014
## 233                                             Dissidia Final Fantasy NT
## 234                                             Skylanders: SuperChargers
## 235                                                        Yakuza Kiwami
## 236                                                     Tales of Zestiria
## 237                            Star Ocean 5: Integrity and Faithlessness
## 238                                                         Sleeping Dogs
## 239                                             Skylanders SWAP Force
## 240                                             Skylanders Imaginators
## 241                                                        Trials Fusion
## 242                                                        Saints Row IV
## 243                                                           Dishonored
## 244                                                     Mirror's Edge 2
## 245                                             Farming Simulator 2015
## 246                                                      Just Dance 2015
## 247                              Sword Art Online: Hollow Realization
## 248                                                      Just Dance 2016
## 249                                                    Batman: Arkham VR
## 250                                                    Little Nightmares
## 251                                                            Tropico 5
## 252                                                       Life is Strange
## 253                                                    Resident Evil Zero
## 254                                                      Yakuza Kiwami 2
## 255                                                               Vampyr
## 256                                                                Okami
## 257                                             Sniper: Ghost Warrior 3
## 258                                                    Hokuto ga Gotoku
## 259                                       Sword Art Online: Lost Song
## 260                                    Disgaea 5: Alliance of Vengeance
## 261                                                      Dead or Alive 5
## 262                                                       Gravity Rush 2
## 263                                             Odin Sphere: Leifthrasir
## 264                                               Divinity: Original Sin
## 265                                             The King of Fighters XIV
## 266                                    Dishonored: Death of the Outsider
## 267                                                   Valkyria Chronicles
## 268                                               Murdered: Soul Suspect
## 269                                                             Payday 2
## 270                                                       UEFA Euro 2016
## 271                                                   DmC: Devil May Cry
## 272                                                          Sonic Mania
## 273                                                      J Stars Victory Vs.
## 274                                                               XCOM 2
## 275                                     Dynasty Warriors 8: Xtreme Legends
## 276                                                      Cities: Skylines
## 277                                             Saint Seiya: Soldiers' Soul
## 278                                                      Just Dance 2018
```

279   The Walking Dead: Season Two
280   Sword Art Online: Fatal Bullet
281   Naruto to Boruto: Shinobi Striker
282   Yooka-Laylee
283   Cars 3: Driven to Win
284   Metal Gear Solid V: The Definitive Experience
285   Sherlock Holmes: Crimes & Punishments
286   Star Trek Bridge Crew VR
287   The Heavy Rain and Beyond: Two Souls Collection
288   Spintires: MudRunner
289   Onechanbara Z2: Chaos
290   Secret of Mana
291   Gundam Versus
292   NBA Live 14
293   Bravo Team VR
294   Killing Floor 2\xca
295   Robinson: The Journey
296   DriveClub VR
297   Fate/Extella: The Umbral Star
298   Ultimate Marvel vs. Capcom 3
299   New Danganronpa V3: Minna no Koroshiai Shin Gakki
300   Samurai Warriors 4
301   Darksiders III
302   NBA Live 15
303   NBA Live 18
304   Tearaway Unfolded
305   .hack//G.U. Last Recode
306   Ride
307   Just Dance 2017
308   The Escapists 2
309   Transformers: Devastation
310   Darksiders II
311   Jikkyou Powerful Pro Baseball 2016
312   The Elder Scrolls Online: Morrowind
313   Digimon World: Next Order
314   theHunter: Call of the Wild
315   Tony Hawk's Pro Skater 5
316   Angry Birds: Star Wars
317   Elex
318   RIGS: Mechanized Combat League
319   Transformer: Rise of the Dark Spark
320   Dead Island Definitive Collection
321   Metal Gear Survive
322   Singstar Celebration
323   Dead by Daylight
324   Attack on Titan 2
325   The Wolf Among Us
326   Micro Machines: World Series
327   Bladestorm: Nightmare
328   Zombie Army Trilogy
329   Outlast Trinity
330   EVE: Valkyrie
331   Senran Kagura: Peach Beach Splash
332   Ys VIII: Lacrimosa of Dana
333   Bound By Flame
334   NBA Live 16

335   7 Days to Die
336   Dynasty Warriors 8: Empires
337   Dragon's Dogma
338   Godzilla (2015)
339   Eagle Flight
340   Agents of Mayhem
341   MotoGP 14\xca
342   Elite: Dangerous
343   Singstar: Ultimate Party
344   Toukiden Kiwami
345   Batman: A Telltale Game Series
346   The Surge
347   MotoGP 15
348   Resident Evil: Revelations
349   Senran Kagura: Estival Versus
350   Back to the Future: The Game
351   The Walking Dead - The Telltale Series: A New Frontier
352   Resident Evil 6
353   Final Fantasy XIV: Heavensward
354   Final Fantasy XIV: Stormblood
355   Guilty Gear Xrd: Sign
356   Prototype: Biohazard Bundle
357   BlazBlue Central Fiction
358   MXGP 3: The Official Motocross Videogame
359   Ride 2
360   Dead Rising 4
361   Putty Squad
362   Digimon Story: Cyber Sleuth - Hacker's Memory
363   Battlezone
364   Naruto Shippuden: Ultimate Ninja Storm Legacy
365   Berserk and the Band of the Hawk
366   BlazBlue: Chrono Phantasma Extend
367   Pillars of Eternity
368   Valkyria: Azure Revolution
369   Gravity Rush Remastered
370   Psycho-Pass: Mandatory Happiness
371   Brothers: A Tale of Two Sons
372   Warriors Orochi 3
373   Wasteland 2
374   Atelier Sophie: The Alchemist of the Mysterious Book
375   NASCAR Heat Evolution
376   Yakuza: Ishin
377   Toukiden 2
378   Song of the Deep
379   Super Robot Wars V
380   Blue Reflection: Maboroshi ni Mau - Shoujo no Ken
381   Yonmegami Online: Cyber Dimension Neptune
382   Grand Kingdom
383   Arslan: The Warriors of Legend
384   Pro Cycling Manager 2016
385   Shovel Knight
386   Adventure Time: Finn & Jake Investigations
387   Guilty Gear Xrd -Revelator-
388   We Happy Few
389   Rocksmith 2014 Edition Remastered
390   The Crew: Wild Run

```
## 391                                                                    MXGP 2
## 392                                                                MotoGP 17
## 393                                            Fairy Fencer F: Advent Dark Force
## 394                                                    Samurai Warriors 4-II
## 395                                                            The Golf Club
## 396                                                Hatsune Miku: Project Diva X
## 397                                                            NASCAR Heat 2
## 398                                            Bulletstorm: Full Clip Edition
## 399                                                Valentino Rossi: The Game
## 400                                                            Golf Club 2
## 401                                                            Akiba's Trip 2
## 402                                                                Rugby 15
## 403                                            Utawarerumono: Futari no Hakuoro
## 404                                The Legend of Heroes: Trails of Cold Steel III
## 405                                            Utawarerumono: Itsuwari no Kamen
## 406                                                            The Inpatient
## 407                                                    Don Bradman Cricket 14
## 408                                            Sword Art Online: Hollow Fragment
## 409                            Teenage Mutant Ninja Turtles: Mutants in Manhattan
## 410                                                            Job Simulator
## 411                                                            Portal Knights
## 412                                                Samurai Warriors 4: Empires
## 413                                                    Danganronpa 1o2 Reload
## 414                                                    God Eater 2: Rage Burst
## 415                        America's Greatest Game Shows: Wheel of Fortune & Jeopardy!
## 416                            Marvel's Guardians of the Galaxy: The Telltale Series
## 417                                                Digimon Story: Cyber Sleuth
## 418                                                            Constructor HD
## 419                                            Minecraft: Story Mode - Season Two
## 420                                                Darksiders: Warmastered Edition
## 421                                                            Mighty No. 9
## 422                                                    The Invisible Hours
## 423                                Monster Energy Supercross - The Official Videogame
## 424                                                The Idolmaster: Platinum Stars
## 425                                            The Witch and the Hundred Knight
## 426                                                SD Gundam G Generation Genesis
## 427                                                                    Rime
## 428                                            Super Robot Wars OG: The Moon Dwellers
## 429                                                        Gundam Breaker 3
## 430                                Earth Defense Force 2025.1: The Shadow of New Despair
## 431                                                    Shadow Warrior (2013)
## 432                                                Assassin's Creed Chronicles
## 433                                                Mega Man Legacy Collection
## 434                                Pac-Man Championship Edition 2 + Arcade Game Series
## 435                                                            Tokyo Xanadu eX+
## 436                                                            Stardew Valley
## 437                                                Romance of the Three Kingdoms 13
## 438                                                            Musou Stars
## 439                                                Mega Man Legacy Collection 2
## 440                                            Final Fantasy XIV Online Complete Edition
## 441                                                        Devil May Cry 4
## 442                                                        Puyo Puyo Tetris
## 443                                                        Natural Doctrine
## 444                                                        Sudden Strike 4
## 445                                Accel World vs. Sword Art Online: Millennium Twilight
## 446                                                    Wolfenstein The Two Pack
```

```
## 447                                    Guilty Gear Xrd REV 2
## 448                                   Ultra Street Fighter IV
## 449                                        Let's Sing 2016
## 450                                     Resident Evil 4 HD
## 451                                      Nights of Azure 2
## 452                                        The Technomancer
## 453                                        Nights of Azure
## 454                            Taiko no Tatsujin: Drum Session!
## 455      Nobunaga's Ambition: Sphere of Influence - Sengoku Risshiden
## 456                                     Grand Ages: Medieval
## 457                                     Rugby League Live 4
## 458                                   Toy Soldiers: War Chest
## 459                                   God Eater Resurrection
## 460                                                 Paragon
## 461                                Summon Night 6: Lost Borders
## 462                                      Black Rose Valkyrie
## 463                       Duke Nukem 3D: 20th Anniversary World Tour
## 464                                       ATV Drift & Tricks
## 465                                         Yoru no Nai Kuni
## 466                         Lara Croft and the Temple of Osiris
## 467                                    Dragon's Dogma Online
## 468                                        Ghostbusters (2016)
## 469                            Agatha Christie's The ABC Murders
## 470                                   Shantae: Half-Genie Hero
## 471                  Earth Defense Force 4.1: The Shadow of New Despair
## 472                                        The Sexy Brutale
## 473                                            Legend of Kay
## 474                        Hasbro Family Fun Pack Conquest Edition
## 475                                           Loading Human
## 476                                   Rapala Fishing Pro Series
## 477              Atelier Firis: The Alchemist of the Mysterious Journey
## 478                                            Dead Rising
## 479                                          Assetto Corsa
## 480                                           Akiba's Beat
## 481                                                   WRC 6
## 482                                   God Wars: Future Past
## 483                                     Resident Evil 5 HD
## 484                          The Witch and the Hundred Knights 2
## 485                              Samurai Warriors: Sanada Maru
## 486                                         Project Setsuna
## 487                                        Has-Been Heroes
## 488         Fortune Street: Dragon Quest & Final Fantasy 30th Anniversary
## 489                                  Styx: Shards of Darknes
## 490                                          Dead Rising 2
## 491                             The Book of Unwritten Tales 2
## 492                             Touhou Genso Rondo: Bullet Ballet
## 493                   The Walking Dead: A Telltale Series Collection
## 494                                         The Silver Case
## 495                                       Hunting Simulator
## 496                                                   WRC 7
## 497                            Kamen Rider: Battride War Genesis
## 498                                   Le Tour de France 2017
## 499                                 City Shrouded in Shadow
## 500                              SG/ZH: School Girl/Zombie Hunter
## 501                          Broken Sword 5: The Serpent's Curse
## 502                                                Terraria
```

503   Warhammer: The End Times - Vermintide
504   Batman: The Enemy Within
505   Atari Flashback Classics: Volume 1
506   Legend of Kay Anniversary
507   Steins;Gate 0
508   ZombiU
509   Risen 3: Titan Lords
510   Mark McMorris Infinite Air
511   Dead or Alive Xtreme 3: Fortune
512   Birthdays the Beginning
513   Rugby 18
514   The Binding of Isaac
515   Sherlock Holmes: The Devil's Daughter
516   Atelier Liddy and Soeur: Alchemists of the Mysterious Painting
517   MX vs. ATV Supercross Encore
518   MX vs ATV Supercross Encore 2017 Track Edition
519   Sword Art Online: Game Director's Edition
520   Deformers
521   Nobunaga no Yabou: Souzou
522   Dragon Quest X: All in One Package
523   Yomawari: Midnight Shadows
524   Game of Thrones (Telltale)
525   Atari Flashback Classics: Volume 2
526   Outcast: Second Contact
527   Cartoon Network Battle Crashers
528   Handball 16
529   Extinction
530   Rugby World Cup 2015
531   Exist Archive: The Other Side of the Sky
532   King's Quest: The Complete Collection
533   Sine Mora
534   Aven Colony
535   Battle Chasers: Nightwar
536   WRC 5: FIA World Rally Championship
537   Black Mirror
538   Touhou Genso Wanderer
539   Arcania: Gothic 4
540   Starblood Arena VR
541   Hellblade
542   Bubsy: The Woolies Strike Back
543   Nitroplus Blasterz: Heroines Infinite Duel
544   Nobunaga's Ambition: Creation
545   Child of Light
546   Phantasy Star Online 2 Episode 4: Deluxe Package
547   Saints Row: Gat out of Hell
548   Werewolves Within
549   Demon Gaze 2
550   Real Farm
551   Worms: WMD
552   Syberia III
553   Sengoku Basara: Sanada Yukimura-Den
554   Sengoku Basara 4: Sumeragi
555   S\x8ebastien Loeb Rally Evo
556   Don't Starve
557   Monster Jam: Crush It
558   Prison Architect

```
## 559                                              Assault Suit Leynos
## 560         Tokyo Twilight Ghost Hunters Daybreak: Special Gigs
## 561                                                   Overcooked
## 562                                                Ben 10 (2017)
## 563                                                Dead Alliance
## 564                                         Deer Hunter Reloaded
## 565                                                   That's You
## 566                                            Raid: World War II
## 567                           Hyperdimension Neptunia Victory II
## 568                             Zero Escape The Nonary Games
## 569                                            Rugby Challenge 3
## 570                                   Vikings: Wolves of Midgard
## 571                                  INSIDE / LIMBO Double Pack
## 572                                           The Talos Principle
## 573                               Megadimension Neptunia VIIR
## 574                                         R.B.I. Baseball 2016
## 575                                           Pure Farming 2018
## 576                                   Air Conflicts: Secret Wars
## 577                                  Anima - Gate of Memories
## 578                                                   Axiom Verge
## 579                                 Unbox: Newbie's Adventure
## 580                                              Here They Lie
## 581                             Under Night In-Birth Exe:Latest
## 582                                                      Aragami
## 583                         Yonder: The Cloud Catcher Chronicles
## 584                           Assassin's Creed Chronicles: China
## 585                   JoJo's Bizarre Adventure: Eyes of Heaven
## 586                                                   Dungeons 3
## 587                                        Tour de France 2014
## 588         Danganronpa Another Episode: Ultra Despair Girls
## 589                       Aegis of Earth: Protonovus Assault
## 590                                                     Just Sing
## 591                       Wonder Boy: The Dragon's Trap (Remake)
## 592                                                         Lumo
## 593                                                          ABZU
## 594                        Shadow Tactics: Blades of the Shogun
## 595                                             Darkest Dungeon
## 596                                         R.B.I. Baseball 2017
## 597                                                   Punch Line
## 598                                                      VR Karts
## 599                                Resident Evil: Umbrella Corps
## 600                         Marvel Pinball: Epic Collection Volume 1
## 601     God Eater Off Shot: Lindow-hen Twin Pack & Animation Vol. 2
## 602                                      Infamous: First Light
## 603                                                      Raiden V
## 604             The Peanuts Movie: Snoopy's Grand Adventure
## 605                                                  The Dwarves
## 606                                 Dynasty Warriors: Eiketsuden
## 607                                          Winning Post 8 2016
## 608                             Dragon's Dogma Online: Season 2
## 609                              Coven and Labyrinth of Refrain
## 610                                          Super Dungeon Bros
## 611                                 Blade Arcus from Shining EX
## 612                                                   Troll and I
## 613                                   The Pillars of the Earth
## 614                                              The Lost Child
```

```
## 615          Romance of the Three Kingdoms 13 with Power-Up Kit
## 616                                               Koihime Enbu
## 617                                                  Road Rage
## 618                                          Winning Post 8 2017
## 619                                  Dino Dini's Kick Off Revival
## 620      God Eater Off Shot:Shiou-hen Twin Pack & Animation Vol.5
## 621                                                Tumblestone
## 622                                               Blackguards 2
## 623                                     Baja: Edge of Control HD
## 624                                         Crows: Burning Edge
## 625                            Geometry Wars 3: Dimensions Evolved
## 626                                               We Sing (2016)
## 627                                           Shin Hayarigami 2
## 628                                          The Town of Light
## 629                                  OlliOlli: Epic Combo Edition
## 630          Naruto Shippuden Ultimate Ninja Storm 4: Road to Boruto
## 631                                           This War of Mine
## 632                                  Ao no Kanata no Four Rhythm
## 633                             Zero Escape: Zero Time Dilemma
## 634                                                      AereA
## 635                                                Root Letter
## 636                                            ClaDun Sengoku
## 637                                      The Girl and the Robot
## 638                                             Omega Quintet
## 639                            Touhou Kobuto V: Burst Battle
## 640      God Eater Off Shot: Soma Shikkuzaru-hen Twin Pack & Animation Vol.4
## 641                                          Rugby League Live 3
## 642                                          Omega Labyrinth Z
## 643                                                Lost Sphear
## 644                                            Superbeat: Xonic
## 645                                                 Republique
## 646                                    Super Stardust Ultra VR
## 647                                                     Redout
## 648                                  Resident Evil: Value Pack
## 649      God Eater Off Shot: Tachibana Sakuya-hen Twin Pack & Animation Vol.7
## 650                                 PaRappa the Rapper Remastered
## 651                                               Earth's Dawn
## 652                                    Big Buck Hunter Arcade
## 653                                                 Dungeons 2
## 654                                               Tricky Towers
## 655                                         No Heroes Allowed! VR
## 656                             ArmaGallant: Decks of Destiny
## 657                                    Carmageddon: Max Damage
## 658                                                    Armello
## 659                                 Shaq-Fu: A Legend Reborn
## 660                                         Patapon Remastered
## 661                       Monster Hunter Frontier Z: Beginner's Package
## 662                                     Professional Farmer 2016
## 663                            Natsuiro High School: Seishun Hakusho
## 664                             The Inner World: The Last Wind Monk
## 665                                         SteamWorld Collection
## 666                       Konoyo no Hate de Koi o Utau Shoujo: Yu-No
## 667      God Eater Off Shot: Fujiki Kota-hen Twin Pack & Animation Vol.6
## 668                                 Genkai Tokki: Castle Panzers
## 669                                     Skullgirls: 2nd Encore
## 670                                          This Is The Police
```

671   Rabbids Invasion: The Interactive TV Show
672   FlatOut 4: Total Insanity
673   Chaos;Child
674   Touhou Shinhiroku: Urban Legend in Limbo
675   Rogue Trooper: Redux
676   Space Hulk: Deathwing
677   Pharaonic
678   White Day
679   Torment: Tides of Numenera
680   Let It Die
681   Summer Lesson: Miyamoto Hikari Collection
682   Raven's Cry
683   New Game! The Challenge Stage!
684   Hakoniwa Company Works
685   DJ Max Respect
686   Battle Worlds: Kronos
687   Dragon's Dogma Online: Season 3
688   Occultic;Nine
689   Kono Subarashii Sekai ni Shukufuku o! Kono Yokubukai Game ni Shinpan o!
690   Battle Garegga Rev.2016
691   Yahari Game Demo Ore no Seishun Love-Kome wa Machigatteiru. & Zoku: Oatome Set
692   Farming 2017 - The Simulation
693   Re:Zero - Kara Hajimeru Isekai Seikatsu - Death or Kiss
694   Zombie Vikings
695   ATV Renegades
696   Ziggurat
697   Chaos;Child: Love Chu Chu!!
698   Moto Racer 4
699   LocoRoco Remastered
700   Lock's Quest
701   Gal Gun: Double Peace
702   Woodcutter Simulator 2016
703   Akiba's Trip 2+A
704   Date-A-Live Twin Edition: Rio Reincarnation
705   Valhalla Hills
706   Deception IV: Blood Ties
707   One Piece: Unlimited World Red
708   Hyper Light Drifter
709   Teslagrad
710   Darius Burst: Chronicle Saviours
711   The Escapists: The Walking Dead
712   Super Meat Boy
713   Blood Bowl 2
714   The Witness
715   Quantic Dream Collection
716   Iwaihime: Matsuri
717   RepKiss
718   War Thunder
719   Tsuihou Senkyo
720   Hustle Kings VR
721   Toki Tori 2+
722   Deception IV: The Nightmare Princess
723   Kingdom Hearts HD I.5 + II.5 ReMIX
724   Fushigi no Chronicle: Furikaerimasen Katsu Madewa
725   A Boy and His Blob
726   Agatha Christie: The ABC Murders

```
## 727                    Ancients of Ooga - The Forgotten Chapters
## 728                                              Another World
## 729                                               Ape Escape 2
## 730                                             Bee Tap Extreme
## 731                                      Blacklight: Retribution
## 732                           Bladestorm: The Hundred Years' War
## 733                                Brothers in Arms: Furious 4
## 734                                                 Cel Damage
## 735                                  Woolfe: The Red Hood Diaries
## 736                                                Dark Cloud 2
## 737                                            DC Universe Online
## 738                                                         Fez
## 739                                             Guardian Knight
## 740                                                  Heavy Rain
## 741                                            Industry Giant II
## 742             King's Quest I: Quest for the Crown (VGA Version)
## 743                                       Kingdom Under Fire II
## 744                                              Ladybug Puzzle
## 745                        Maniac Mansion: Day of the Tentacle
## 746                                                Metal Slug 3
## 747                                        Mount & Blade: Warband
## 748                          Pier Solar and the Great Architects
## 749                                             Piggy Adventure
## 750                                                 PlanetSide 2
## 751                                                  Psychonauts
## 752                                              Resident Evil 5
## 753                                                 Sound Shapes
## 754                              Star Ocean: Till The End of Time
## 755                                            Super Motherload
## 756                                    The Amazing Spider-Man 2
## 757                                    The King of Fighters 2000
## 758                                                  Rack N Ruin
## 759                                                    Ether One
## 760                                   Uncharted 2: Among Thieves
## 761                                Uncharted 3: Drake's Deception
## 762                             Uncharted Waters Online: Gran Atlas
## 763                                  Uncharted: Drake's Fortune
## 764                                      Werewolves vs Vampires
## 765                                                 Awesomenauts
## 766                                       Dust: An Elysian Tail
## 767                                                  Skullgirls
## 768                                                       flower
## 769                                     Gran Turismo HD Concept
## 770                                           PixelJunk Shooter
## 771                                         PixelJunk Shooter 2
## 772                                                Rainbow Moon
## 773                                                 Dear Esther
## 774                           Oddworld: Abe's Oddysee New N' Tasty!
## 775                                                  Broken Age
## 776                                                    Apotheon
## 777                                                Two Brothers
## 778                                         Slender: The Arrival
## 779                                     deep down (Working Title)
## 780                                               Hotline Miami
## 781                                         The Unfinished Swan
## 782                                              Human Element
```

```
## 783                                  Whore of the Orient
## 784                                      Cyberpunk 2077
## 785                                  Final Fantasy (PS4)
## 786                                          Transistor
## 787                                         The Swapper
## 788                                             Outlast
## 789                                            Contrast
## 790                                          Guacamelee!
## 791                             Carmageddon: Reincarnation
## 792                             Rocketbirds 2: Evolution
## 793                               Primal Carnage: Genesis
## 794                                    Doki-Doki Universe
## 795                                             Hohokum
## 796                                           CounterSpy
## 797                                          War Thunder
## 798                                            Warframe
## 799                                      The Banner Saga
## 800                                             BADLAND
## 801                                            Sparkle 2
## 802                                            Daylight
## 803                                            Peggle 2
## 804                                  Kingdom Hearts III
## 805                                    Mercenary Kings
## 806                                      Secret Ponchos
## 807                              Octodad: Dadliest Catch
## 808                                             Galak-Z
## 809                                      Ray's the Dead
## 810                             Yaiba: Ninja Gaiden Z
## 811                                            KickBeat
## 812                                         Tiny Brains
## 813                                 Stick It to the Man
## 814                         Aban Hawkins & the 1001 Spikes
## 815                         Home - a Unique Horror Adventure
## 816                                           Soul Saga
## 817                                      Pinball Arcade
## 818                          Toukiden: The Age of Demons
## 819                                                Reus
## 820                                       Strider (2014)
## 821                                        Rogue Legacy
## 822                                      EverQuest Next
## 823                                      Project Phoenix
## 824                                     Defense Grid 2
## 825                          Drifter: A Space Trading Game
## 826                                              Volume
## 827                                            Hellraid
## 828                         SteamWorld Dig: A Fistful of Dirt
## 829                                            Armikrog
## 830                                               Chasm
## 831                                XING: The Land Beyond
## 832                                  There Came an Echo
## 833                                     Strike Suit Zero
## 834                                      Basement Crawl
## 835                                          Velocity 2X
## 836                                           Helldivers
## 837                                             RESOGUN
## 838                          Everybody's Gone to the Rapture
```

```
## 839                                                      Murasaki Baby
## 840                                       Hotline Miami 2: Wrong Number
## 841                                          Shadow of the Beast (PS4)
## 842                                                        WonderFlick
## 843                                                         Monochroma
## 844                                              H-Hour: World's Elite
## 845                                                      SPORTSFRIENDS
## 846                                                        Unmechanical
## 847                                                           Divekick
## 848                                                      Lily Bergamo
## 849                                     Valiant Hearts: The Great War
## 850                                                           OlliOlli
## 851                                                Switch Galaxy Ultra
## 852                                                          Anomaly 2
## 853                                                    Legend of Raven
## 854                                                        Stealth Inc.
## 855                                                  Night in the Woods
## 856                                         Tales from the Borderlands
## 857                                                             Kodoku
## 858                                                            Get Even
## 859                                                        Ready to Run
## 860                                                  Worms Battlegrounds
## 861                                          Assassin's Creed Freedom Cry
## 862                                               Dungeon Defenders II
## 863                               Razor Global Domination Pro Tour\xca
## 864                                                           Pavilion
## 865                                                            forma.8
## 866                                                          TowerFall
## 867                                                     Gone Home\xca
## 868                                                    Costume Quest 2
## 869                                                         Pure Chess
## 870                                                              Aztez
## 871                                                          Not a Hero
## 872                                                         SOMA (2015)
## 873                                                        Cult County
## 874                                                             Adr1ft
## 875                                                 R.B.I. Baseball 14
## 876                                                   Citizens of Earth
## 877                                                               H1Z1
## 878                                                   Blue Estate\xca
## 879                                                     Road Not Taken
## 880                                                             Source
## 881                                                   Backgammon Blitz
## 882                                                         Hitman GO
## 883                                                        MechRunner
## 884                                               The Chainsaw Incident
## 885                                                           Chariot
## 886                                                            Nidhogg
## 887                                                   Ironclad Tactics
## 888                                                          MouseCraft
## 889                                            Starwhal: Just the Tip
## 890                                                         Crimsonland
## 891                                                          VizionEck
## 892                                                    Pure Pool\xca
## 893                                                    Without Memory
## 894                                                          Firewatch
```

```
## 895                                              Never Alone
## 896                         The Last Tinker: City of Colors
## 897                                               Bombshell
## 898                                             Red Goddess
## 899                                              The Forest
## 900                                              Fenix Rage
## 901                                               EarthNight
## 902                                             One Way Trip
## 903                             Shiness: The Lightning Kingdom
## 904                                        Aaru's Awakening
## 905                              Falling Skies: The Game\xca
## 906                                                 Onigiri
## 907                                                 Loadout
## 908                                                Entwined
## 909                                       EA Sports PGA Tour
## 910                                            Dead Island 2
## 911                                               Magicka 2
## 912                                                Broforce
## 913                                                  Inside
## 914                                        Blast 'Em Bunnies
## 915                                              Woah Dave!
## 916                                            The Assembly
## 917                                       Tetris Ultimate\xca
## 918                                           Afro Samurai 2
## 919                                 The Legend of Korra (2014)
## 920                           The Vanishing of Ethan Carter\xca
## 921                                          Godzilla (2014)
## 922                                           Gran Turismo 7
## 923                                       Rollers of the Realm
## 924                                         Q*bert: Rebooted
## 925                                            AirMech Arena
## 926                             The Walking Dead: Season Three
## 927                                                   Toren
## 928                                   Pneuma: Breath of Life
## 929                                          #killallzombies
## 930                                           The Escapists
## 931                                     The Tomorrow Children
## 932                                              Hollowpoint
## 933                                         In Space We Brawl
## 934                                                    Wild
## 935                                               Alienation
## 936                                                 Ubusuna
## 937                                             PIX the CAT
## 938                                                  Game 4
## 939                                             Titan Souls
## 940                                     OniKira: Demon Killer
## 941                                             Moon Hunters
## 942                                        Salt and Sanctuary
## 943                                           Alone With You
## 944                       Tadeo Jones y el manuscrito perdido
## 945                                       Invokers Tournament
## 946                              OlliOlli 2: Welcome to Olliwood
## 947                                              Pathologic
## 948                                                    Soma
## 949                                             Rebel Galaxy
## 950                                              I Am Bread
```

```
## 951                                       Geometry Wars 3: Dimensions
## 952                                        Primal Carnage: Extinction
## 953                                         Assassin's Creed: Victory
## 954                                                       Silent Hills
## 955                                                   The Banner Saga 2
## 956                                                   Enter the Gungeon
## 957                                       What Remains of Edith Finch
## 958                                                             Wattam
## 959                                             Fat Princess Adventures
## 960                                                            Skytorn
## 961                                                        Kill Strain
## 962                                                     Drawn to Death
## 963                                                          Grow Home
## 964                                                           Apotheon
## 965                                                             Hunger
## 966                                                 Magic Duels: Origin
## 967                                                         Shiftlings
## 968                              Oceanhorn: Monster of Uncharted Seas
## 969                                                        Beyond Eyes
## 970                                                    Inside My Radio
## 971                                          Tembo the Badass Elephant
## 972                               Assassin's Creed Chronicles: Russia
## 973                                Assassin's Creed Chronicles: India
## 974                                         Overlord: Fellowship of Evil
## 975                                                R.B.I. Baseball 15
## 976                                                    Krinkle Krusher
## 977                                                             Wander
## 978                                          Trans-Galactic Tournament
## 979                                         The Walking Dead: Michonne
## 980                                                            Unravel
## 981                                                    Tachyon Project
## 982                                             Final Fantasy VII Remake
## 983                                           Ikenie to Yuki no Setsuna
## 984                                                      Atelier Sophie
## 985                              Dengeki Bunko: Fighting Climax Ignition
## 986                                       World Soccer Winning Eleven 2015
## 987                                       Muse: Together Is the New Alone
## 988                                                       Cross Reverie
## 989                                                          Airship Q
## 990                                                       Killing Bites
## 991                                Hatsune Miku: Project Diva Future Tone
## 992                                            Tiny Troopers Joint Ops
## 993                                                    The London Heist
## 994                                            Risen 3 Enhanced Edition
## 995                                       Air Conflicts: Pacific Carriers
## 996                                              God Wars: Beyond Time
## 997                                             Hasbro Family Fun Pack
## 998                                         Professional Lumberjack 2016
## 999                                                      Alekhine's Gun
## 1000                          Kung Fu Panda: Showdown of Legendary Legends
## 1001                                                Read Only Memories
## 1002                                                    Shakedown Hawaii
## 1003                                                      Fallen Legion
## 1004                                                    Amplitude (2016)
## 1005                                         Bloodborne: Complete Edition
## 1006                                                    Hardware: Rivals
```

```
## 1007                           Jikkyou Powerful Pro Baseball Success Special
## 1008                                                  Qurare: Magic Library
## 1009                                                      World to the West
## 1010                                            The Binding of Isaac: Rebirth
## 1011                                                             De-formers
## 1012                                    Rock of Ages II: Bigger and Boulder
## 1013                                                                     Fe
## 1014                                                              Days Gone
## 1015                                                          Berserk Musou
## 1016                                           Ginger: Beyond the Crystal
## 1017                                               The Last of Us: Part II
## 1018                                                 Don Bradman Cricket 17
## 1019                                            Ace Combat 7: Skies Unknown
## 1020                                             Sakuna: Of Rice and Ruin
## 1021                                                            Metro Exodus
## 1022                                                                 Anthem
## 1023                                                       Moons Of Madness
## 1024                                                           Iron Harvest
## 1025                                                               Biomutant
## 1026                                                               Biomutant
## 1027                                                                de Blob
## 1028                                                        Chaos on Deponia
## 1029                                                              Code Vein
## 1030                                     Fallen Legion: Flames of Rebellion
## 1031                                              Radial G Racing Revolved
## 1032                                                  The Mummy Demastered
## 1033                                              Project Nimbus: Code Mirai
## 1034                                                    Battle Chef Brigade
##      Year          Genre                       Publisher North.America
## 1    2014         Action                 Rockstar Games           6.06
## 2    2015        Shooter                     Activision           6.18
## 3    2018 Action-Adventure                Rockstar Games           5.26
## 4    2017        Shooter                     Activision           4.67
## 5    2017         Sports                      EA Sports           1.27
## 6    2016         Sports                 Electronic Arts           1.26
## 7    2016         Action      Sony Interactive Entertainment        4.49
## 8    2018 Action-Adventure  Sony Interactive Entertainment        3.64
## 9    2016        Shooter                     Activision           3.11
## 10   2015    Role-Playing             Bethesda Softworks           2.91
## 11   2015         Sports                      EA Sports           1.15
## 12   2015        Shooter                 Electronic Arts           3.31
## 13   2014        Shooter                     Activision           2.84
## 14   2016        Shooter                 Electronic Arts           2.20
## 15   2014 Action-Adventure    Sony Computer Entertainment         2.70
## 16   2014           Misc    Sony Computer Entertainment         1.89
## 17   2014         Sports                      EA Sports           0.83
## 18   2018         Action   Sony Interactive Entertainment        2.83
## 19   2017         Action   Sony Interactive Entertainment        2.20
## 20   2014        Shooter                     Activision           2.53
## 21   2015         Action    Sony Computer Entertainment         2.55
## 22   2015    Role-Playing            Namco Bandai Games           1.48
## 23   2016    Role-Playing                   Square Enix           1.81
## 24   2017       Platform                     Activision           1.09
## 25   2018         Action                        Capcom           1.03
## 26   2016        Shooter           Blizzard Entertainment           1.84
## 27   2017        Shooter                 Electronic Arts           1.70
```

```
## 28  2016         Shooter                            Ubisoft  1.49
## 29  2015         Shooter                            Ubisoft  1.29
## 30  2014 Action-Adventure                           Ubisoft  1.40
## 31  2013         Shooter                         Activision  1.79
## 32  2014          Action                            Ubisoft  1.25
## 33  2017         Shooter                         Activision  1.92
## 34  2015          Action         Warner Bros. Interactive  1.65
## 35  2017          Action                            Ubisoft  1.22
## 36  2014         Shooter                            Ubisoft  1.18
## 37  2015          Sports                          2K Sports  2.56
## 38  2018          Action                            Ubisoft  1.44
## 39  2013         Shooter                    Electronic Arts  1.40
## 40  2017          Racing    Sony Interactive Entertainment  0.63
## 41  2015          Action                            Ubisoft  0.90
## 42  2016          Sports                          2K Sports  2.28
## 43  2015        Fighting Warner Bros. Interactive Entertainment  1.94
## 44  2013          Sports                          EA Sports  0.62
## 45  2016     Role-Playing               Bethesda Softworks  1.24
## 46  2016          Action                            Ubisoft  0.98
## 47  2017          Sports                          2K Sports  2.13
## 48  2017          Action                             Capcom  0.88
## 49  2015          Sports                          EA Sports  2.39
## 50  2016          Sports                          EA Sports  2.30
## 51  2014          Action Warner Bros. Interactive Entertainment  1.03
## 52  2013 Action-Adventure                           Ubisoft  1.07
## 53  2017         Shooter                            Ubisoft  1.07
## 54  2015     Role-Playing     Sony Computer Entertainment  1.30
## 55  2015          Action     Konami Digital Entertainment  0.97
## 56  2013         Shooter     Sony Computer Entertainment  0.89
## 57  2014 Action-Adventure   Sony Computer Entertainment  1.35
## 58  2016         Shooter              Bethesda Softworks  0.93
## 59  2016 Action-Adventure                           2K Games  0.72
## 60  2014     Role-Playing          Blizzard Entertainment  0.83
## 61  2016 Action-Adventure                           Ubisoft  0.63
## 62  2015          Racing                    Electronic Arts  0.59
## 63  2017          Sports                          EA Sports  1.73
## 64  2014          Sports                          2K Sports  1.49
## 65  2015          Action         Warner Bros. Interactive  1.18
## 66  2016     Role-Playing             Namco Bandai Games  1.00
## 67  2016        Platform    Sony Interactive Entertainment  0.97
## 68  2014          Racing     Sony Computer Entertainment  0.37
## 69  2017          Action    Sony Interactive Entertainment  0.58
## 70  2014     Role-Playing                    Electronic Arts  1.07
## 71  2016 Action-Adventure                        Hello Games  0.89
## 72  2014          Sports                          EA Sports  1.58
## 73  2017          Racing                    Electronic Arts  0.62
## 74  2015         Shooter                         Activision  0.97
## 75  2013          Racing                    Electronic Arts  0.75
## 76  2016            Misc    Sony Interactive Entertainment  0.36
## 77  2015         Shooter                    Electronic Arts  0.72
## 78  2016       Adventure                       Square Enix  0.61
## 79  2014        Platform     Sony Computer Entertainment  0.78
## 80  2015             MMO              Bethesda Softworks  0.74
## 81  2017          Action Warner Bros. Interactive Entertainment  0.82
## 82  2017     Role-Playing                       Square Enix  0.29
## 83  2016          Sports                          505 Games  0.37
```

```
## 84   2015 Action-Adventure                   Square Enix          0.53
## 85   2016          Action              Bethesda Softworks          0.62
## 86   2013          Action Warner Bros. Interactive Entertainment    0.59
## 87   2015       Adventure      Sony Computer Entertainment          0.62
## 88   2013        Platform      Sony Computer Entertainment          0.45
## 89   2014          Action              Bethesda Softworks          0.56
## 90   2014         Racing                         Ubisoft          0.44
## 91   2017    Role-Playing                   Square Enix          0.75
## 92   2017          Action                         Ubisoft          0.73
## 93   2016         Shooter              Electronic Arts          0.75
## 94   2017        Fighting Warner Bros. Interactive Entertainment    0.88
## 95   2017    Role-Playing                   Square Enix          0.56
## 96   2017        Fighting            Namco Bandai Games          0.60
## 97   2016    Role-Playing                    Deep Silver          0.62
## 98   2015         Shooter      Sony Computer Entertainment          0.44
## 99   2014         Shooter              Bethesda Softworks          0.48
## 100  2018       Adventure   Sony Interactive Entertainment          0.55
## 101  2016        Fighting            Namco Bandai Games          0.71
## 102  2013          Sports                       2K Sports          0.91
## 103  2014 Action-Adventure                   Square Enix          0.47
## 104  2016          Action            Namco Bandai Games          0.54
## 105  2014        Platform                         Ubisoft          0.22
## 106  2017    Role-Playing              Electronic Arts          0.58
## 107  2018        Fighting            Namco Bandai Games          0.61
## 108  2017    Role-Playing                         Ubisoft          0.62
## 109  2017      Simulation              Electronic Arts          0.44
## 110  2016        Fighting                          Capcom          0.64
## 111  2017         Shooter              Bethesda Softworks          0.55
## 112  2017          Sports                       2K Sports          0.45
## 113  2016 Action-Adventure Warner Bros. Interactive Entertainment    0.30
## 114  2016          Sports                       EA Sports          0.44
## 115  2016 Action-Adventure   Sony Interactive Entertainment          0.40
## 116  2015          Sports          Take-Two Interactive          0.43
## 117  2015         Shooter                       2K Games          0.69
## 118  2015         Racing          Bandai Namco Games          0.29
## 119  2016          Sports                       2K Games          0.32
## 120  2015           Music                       Activision          0.52
## 121  2014 Action-Adventure      Konami Digital Entertainment          0.36
## 122  2015          Action Warner Bros. Interactive Entertainment    0.38
## 123  2018 Action-Adventure   Sony Interactive Entertainment          0.44
## 124  2017    Role-Playing                   Square Enix          0.57
## 125  2015        Fighting            Namco Bandai Games          0.33
## 126  2015          Action Warner Bros. Interactive Entertainment    0.48
## 127  2015          Action Warner Bros. Interactive Entertainment    0.41
## 128  2014          Sports                       2K Sports          0.40
## 129  2017          Sports   Sony Interactive Entertainment          0.94
## 130  2017            Misc Warner Bros. Interactive Entertainment    0.21
## 131  2017    Role-Playing              Bethesda Softworks          0.47
## 132  2017          Action Warner Bros. Interactive Entertainment    0.33
## 133  2014        Fighting              Electronic Arts          0.49
## 134  2017    Role-Playing                   Square Enix          0.37
## 135  2014       Adventure                            Sega          0.29
## 136  2018          Sports   Sony Interactive Entertainment          0.86
## 137  2017          Action              Bethesda Softworks          0.31
## 138  2017         Shooter              Bethesda Softworks          0.25
## 139  2015    Role-Playing                   Square Enix          0.40
```

```
## 140  2017       Action                                Tecmo Koei   0.34
## 141  2015       Sports      Sony Computer Entertainment             0.75
## 142  2016       Sports                                  Ubisoft   0.23
## 143  2016       Action Warner Bros. Interactive Entertainment       0.31
## 144  2015      Shooter                                2K Games   0.38
## 145  2013     Fighting Warner Bros. Interactive Entertainment       0.46
## 146  2018       Sports                               EA Sports   0.40
## 147  2013       Sports                               EA Sports   0.64
## 148  2016       Sports      Sony Computer Entertainment             0.78
## 149  2014       Action Warner Bros. Interactive Entertainment       0.37
## 150  2015  Role-Playing                             Square Enix   0.34
## 151  2018  Role-Playing               Namco Bandai Games         0.33
## 152  2015       Action      Sony Computer Entertainment             0.40
## 153  2017       Action               Gearbox Software            0.42
## 154  2016       Action Warner Bros. Interactive Entertainment       0.07
## 155  2015    Adventure                                  Mojang   0.31
## 156  2016      Shooter                                2K Games   0.41
## 157  2014       Action                             Square Enix   0.28
## 158  2016      Shooter      Sony Interactive Entertainment          0.50
## 159  2015       Action       Disney Interactive Studios           0.31
## 160  2016   Simulation          Focus Home Interactive             0.19
## 161  2018       Racing                                 Ubisoft   0.22
## 162  2015       Sports       Konami Digital Entertainment          0.14
## 163  2017       Action                Studio Wildcard             0.28
## 164  2015       Action                             Square Enix   0.21
## 165  2016       Action                                 Ubisoft   0.14
## 166  2014          MMO                             Square Enix   0.35
## 167  2016      Shooter                              Activision   0.24
## 168  2016       Racing                             Codemasters   0.07
## 169  2017       Action                             Square Enix   0.24
## 170  2014       Sports       Konami Digital Entertainment          0.09
## 171  2017     Platform Warner Bros. Interactive Entertainment       0.17
## 172  2017       Sports       Konami Digital Entertainment          0.12
## 173  2014 Action-Adventure       Disney Interactive Studios       0.37
## 174  2016       Sports       Konami Digital Entertainment          0.08
## 175  2014      Shooter                               505 Games   0.25
## 176  2014       Sports      Sony Computer Entertainment             0.59
## 177  2017       Racing      Sony Interactive Entertainment          0.12
## 178  2016  Role-Playing                             Square Enix   0.25
## 179  2014 Action-Adventure Warner Bros. Interactive Entertainment   0.26
## 180  2017     Fighting                                  Capcom   0.36
## 181  2015  Role-Playing               Namco Bandai Games         0.27
## 182  2016    Adventure                                    Sega   0.16
## 183  2015       Racing                             Codemasters   0.10
## 184  2014      Shooter                             Deep Silver   0.22
## 185  2014        Music                                 Ubisoft   0.38
## 186  2015       Sports                               EA Sports   0.38
## 187  2014      Shooter                         Electronic Arts   0.24
## 188  2016  Role-Playing               Namco Bandai Games         0.22
## 189  2015    Adventure                                    Sega   0.22
## 190  2016     Fighting               Namco Bandai Games         0.21
## 191  2016       Action Warner Bros. Interactive Entertainment       0.15
## 192  2016      Shooter                         Electronic Arts   0.22
## 193  2014 Action-Adventure Warner Bros. Interactive Entertainment   0.14
## 194  2016  Role-Playing                             Square Enix   0.24
## 195  2017       Racing                              Koch Media   0.04
```

```
## 196  2014        Sports                    EA Sports           0.32
## 197  2017         Party   Sony Interactive Entertainment       0.05
## 198  2017     Adventure              Rockstar Games            0.18
## 199  2017     Adventure   Sony Interactive Entertainment       0.08
## 200  2017       Shooter                  Activision            0.17
## 201  2016  Role-Playing                 Square Enix            0.12
## 202  2017        Action Warner Bros. Interactive Entertainment 0.16
## 203  2015        Action                    Capcom              0.14
## 204  2015         Music     Harmonix Music Systems             0.41
## 205  2017        Sports                    EA Sports           0.31
## 206  2017        Sports   Sony Interactive Entertainment       0.12
## 207  2014 Action-Adventure                Activision           0.20
## 208  2017       Shooter         Bethesda Softworks             0.22
## 209  2017      Platform                    Sega                0.15
## 210  2018  Role-Playing                 Deep Silver            0.18
## 211  2014  Role-Playing                 Square Enix            0.20
## 212  2017       Shooter    Rebellion Developments              0.21
## 213  2015        Sports         Electronic Arts                0.19
## 214  2017        Racing      Namco Bandai Games                0.10
## 215  2014      Platform                  Activision            0.25
## 216  2016        Sports                    EA Sports           0.32
## 217  2015        Action      Namco Bandai Games                0.11
## 218  2016        Racing                 Codemasters            0.13
## 219  2016       Shooter                 Deep Silver            0.11
## 220  2016        Action                 Tecmo Koei             0.08
## 221  2017        Racing                 Codemasters            0.10
## 222  2017       Shooter   Sony Interactive Entertainment       0.00
## 223  2016       Shooter                   2K Games             0.25
## 224  2018        Action         Electronic Arts                0.23
## 225  2017        Action                  Gun Media             0.29
## 226  2014     Adventure              Telltale Games            0.12
## 227  2015       Shooter         Bethesda Softworks             0.13
## 228  2015        Action                  Activision            0.26
## 229  2016        Action                 Square Enix            0.05
## 230  2016        Racing                   Ubisoft              0.04
## 231  2017      Platform   Sony Interactive Entertainment       0.14
## 232  2013         Music                   Ubisoft              0.21
## 233  2018      Fighting                 Square Enix            0.19
## 234  2015 Action-Adventure                Activision           0.29
## 235  2016     Adventure                    Sega                0.13
## 236  2015  Role-Playing      Namco Bandai Games                0.18
## 237  2016  Role-Playing                 Square Enix            0.10
## 238  2014        Action                 Square Enix            0.16
## 239  2013          Misc                  Activision            0.23
## 240  2016      Platform                  Activision            0.18
## 241  2014          Misc                   Ubisoft              0.13
## 242  2015        Action                 Deep Silver            0.15
## 243  2015        Action         Bethesda Softworks             0.12
## 244  2016      Platform         Electronic Arts                0.13
## 245  2015    Simulation                 Koch Media             0.13
## 246  2014         Music                   Ubisoft              0.21
## 247  2016  Role-Playing      Namco Bandai Games                0.18
## 248  2015         Music                   Ubisoft              0.19
## 249  2016        Action Warner Bros. Interactive Entertainment 0.32
## 250  2017      Platform      Namco Bandai Games                0.18
## 251  2015    Simulation                Kalypso Media           0.07
```

```
## 252  2016         Adventure                        Square Enix  0.11
## 253  2016 Action-Adventure                              Capcom  0.07
## 254  2017            Action                                Sega  0.08
## 255  2018       Role-Playing         Focus Home Interactive  0.12
## 256  2017            Action                              Capcom  0.16
## 257  2017           Shooter                    City Interactive  0.14
## 258  2018            Action                                Sega  0.09
## 259  2015       Role-Playing                Namco Bandai Games  0.19
## 260  2015       Role-Playing                         NIS America  0.15
## 261  2015          Fighting                          Tecmo Koei  0.09
## 262  2017 Action-Adventure   Sony Interactive Entertainment  0.13
## 263  2016       Role-Playing                         NIS America  0.14
## 264  2015       Role-Playing         Focus Home Interactive  0.13
## 265  2016          Fighting                         Deep Silver  0.21
## 266  2017            Action                  Bethesda Softworks  0.10
## 267  2016       Role-Playing                                Sega  0.14
## 268  2014 Action-Adventure                        Square Enix  0.09
## 269  2015           Shooter                           505 Games  0.12
## 270  2016            Sports   Konami Digital Entertainment  0.00
## 271  2015            Action                              Capcom  0.12
## 272  2017          Platform                                Sega  0.10
## 273  2015          Fighting                Namco Bandai Games  0.11
## 274  2016          Strategy                            2K Games  0.16
## 275  2014              Misc                          Tecmo Koei  0.09
## 276  2017        Simulation                          Koch Media  0.15
## 277  2015          Fighting                Namco Bandai Games  0.00
## 278  2017             Music                             Ubisoft  0.10
## 279  2014              Misc                        Square Enix  0.13
## 280  2018       Role-Playing                Namco Bandai Games  0.11
## 281  2018            Action                Bandai Namco Games  0.19
## 282  2017          Platform                            Sold Out  0.09
## 283  2017            Racing Warner Bros. Interactive Entertainment  0.06
## 284  2016            Action   Konami Digital Entertainment  0.13
## 285  2014         Adventure         Focus Home Interactive  0.10
## 286  2017            Action                             Ubisoft  0.11
## 287  2016            Action   Sony Computer Entertainment  0.00
## 288  2017        Simulation         Focus Home Interactive  0.11
## 289  2014            Action                         NIS America  0.16
## 290  2018       Role-Playing                        Square Enix  0.06
## 291  2017            Action                Namco Bandai Games  0.08
## 292  2013            Sports                           EA Sports  0.17
## 293  2018           Shooter   Sony Interactive Entertainment  0.12
## 294  2016           Shooter                Tripwire Interactive  0.19
## 295  2016 Action-Adventure   Sony Interactive Entertainment  0.14
## 296  2016            Racing   Sony Interactive Entertainment  0.12
## 297  2016            Action                               PQube  0.12
## 298  2017          Fighting                              Capcom  0.19
## 299  2017         Adventure                         NIS America  0.09
## 300  2014          Fighting                          Tecmo Koei  0.08
## 301  2018            Action                          THQ Nordic  0.13
## 302  2014            Sports                     Electronic Arts  0.16
## 303  2017            Sports                           EA Sports  0.20
## 304  2015          Platform   Sony Computer Entertainment  0.07
## 305  2017       Role-Playing                Namco Bandai Games  0.10
## 306  2015            Racing                     Milestone S.r.l.  0.04
## 307  2016              Misc                             Ubisoft  0.08
```

```
## 308  2017         Action                            Sold Out       0.04
## 309  2015         Action                           Activision      0.11
## 310  2015 Action-Adventure                        Nordic Games     0.10
## 311  2016         Sports        Konami Digital Entertainment       0.00
## 312  2017            MMO              Bethesda Softworks            0.11
## 313  2017    Role-Playing         Namco Bandai Games               0.13
## 314  2017        Shooter                              Astragon      0.19
## 315  2015         Sports                           Activision      0.11
## 316  2013         Puzzle                            Activision      0.11
## 317  2017    Role-Playing                          THQ Nordic      0.03
## 318  2016         Action     Sony Interactive Entertainment        0.11
## 319  2014        Shooter                           Activision      0.08
## 320  2016         Action                           Deep Silver     0.09
## 321  2018         Action        Konami Digital Entertainment       0.08
## 322  2017          Music      Sony Interactive Entertainment       0.04
## 323  2017         Action                             505 Games     0.11
## 324  2018         Action                            Koei Tecmo     0.09
## 325  2014      Adventure               Telltale Games              0.11
## 326  2017         Racing                          Codemasters     0.03
## 327  2015         Action                            Tecmo Koei     0.11
## 328  2015        Shooter        Rebellion Developments             0.06
## 329  2017         Action Warner Bros. Interactive Entertainment    0.09
## 330  2016        Shooter     Sony Interactive Entertainment        0.11
## 331  2017         Action                                 PQube     0.09
## 332  2017    Role-Playing                          NIS America     0.08
## 333  2014         Action        Focus Home Interactive             0.08
## 334  2015         Sports                           EA Sports      0.13
## 335  2016         Action               Telltale Games              0.09
## 336  2014           Misc                Tecmo Koei               0.07
## 337  2017    Role-Playing                             Capcom       0.07
## 338  2014         Action         Namco Bandai Games                0.11
## 339  2016      Adventure                             Ubisoft      0.09
## 340  2017         Action                           Deep Silver     0.08
## 341  2014         Racing             Milestone S.r.l.             0.05
## 342  2017     Simulation        Frontier Developments             0.06
## 343  2014          Music      Sony Computer Entertainment          0.00
## 344  2015         Action                           Tecmo Koei     0.06
## 345  2016      Adventure               Telltale Games              0.09
## 346  2017         Action                          Koch Media      0.07
## 347  2015         Racing             Milestone S.r.l.             0.00
## 348  2017         Action                             Capcom        0.06
## 349  2015         Action        Marvelous Interactive              0.08
## 350  2015      Adventure               Telltale Games              0.10
## 351  2017      Adventure Warner Bros. Interactive Entertainment    0.11
## 352  2016        Shooter                             Capcom        0.10
## 353  2015            MMO                          Square Enix     0.00
## 354  2017            MMO                          Square Enix     0.05
## 355  2014       Fighting         Arc System Works                 0.11
## 356  2016         Action                           Activision      0.14
## 357  2016       Fighting                                PQube     0.10
## 358  2017         Racing                            Milestone     0.06
## 359  2016         Racing             Milestone S.r.l             0.07
## 360  2017 Action-Adventure                           Capcom        0.08
## 361  2013       Platform                            System 3      0.06
## 362  2017    Role-Playing         Namco Bandai Games               0.05
## 363  2016         Action     Sony Interactive Entertainment        0.09
```

```
## 364  2017       Fighting            Namco Bandai Games       0.07
## 365  2016         Action                  Tecmo Koei         0.07
## 366  2015       Fighting                      PQube          0.08
## 367  2017     Role-Playing      Paradox Interactive\xca      0.11
## 368  2017     Role-Playing               Deep Silver         0.04
## 369  2015 Action-Adventure  Sony Computer Entertainment      0.02
## 370  2016     Visual Novel                NIS America        0.10
## 371  2015       Adventure                  505 Games         0.04
## 372  2014         Action                  Tecmo Koei         0.04
## 373  2015     Role-Playing               Deep Silver         0.10
## 374  2015     Role-Playing                Tecmo Koei         0.04
## 375  2016         Racing       Dusenberry Martin Racing      0.12
## 376  2014       Adventure                     Sega          0.00
## 377  2016         Action                  Tecmo Koei         0.04
## 378  2016         Action               Insomniac Games       0.12
## 379  2017     Role-Playing          Namco Bandai Games       0.00
## 380  2017     Role-Playing                Tecmo Koei         0.07
## 381  2017     Role-Playing      Idea Factory International    0.06
## 382  2015     Role-Playing                NIS America        0.08
## 383  2016         Action                  Tecmo Koei         0.03
## 384  2016         Sports         Focus Home Interactive      0.00
## 385  2015        Platform            Yacht Club Games        0.08
## 386  2015         Action                Little Orbit         0.07
## 387  2016       Fighting                     PQube           0.06
## 388  2018 Action-Adventure          Gearbox Software         0.08
## 389  2016          Music                   Ubisoft          0.11
## 390  2015         Racing                    Ubisoft          0.00
## 391  2016         Racing              Milestone S.r.l.       0.05
## 392  2017         Racing                  Koch Media         0.04
## 393  2015     Role-Playing      Idea Factory International    0.06
## 394  2015         Action                  Tecmo Koei         0.04
## 395  2014         Sports                  Ravenscourt        0.09
## 396  2016          Music                      Sega          0.08
## 397  2017         Racing                   505 Games         0.11
## 398  2017        Shooter            Gearbox Software         0.05
## 399  2016         Racing          Namco Bandai Games         0.05
## 400  2017         Sports              Maximum Games          0.05
## 401  2014         Action                    Acquire          0.09
## 402  2015         Sports           Bigben Interactive        0.05
## 403  2016     Visual Novel                   Atlus          0.05
## 404  2017     Role-Playing      Nihon Falcom Corporation     0.00
## 405  2015       Adventure                Deep Silver         0.05
## 406  2018         Action    Sony Interactive Entertainment   0.06
## 407  2015         Sports         Tru Blu Entertainment       0.01
## 408  2015     Role-Playing          Namco Bandai Games       0.00
## 409  2016         Action                  Activision         0.07
## 410  2017       Simulation    Sony Interactive Entertainment 0.10
## 411  2017     Role-Playing                 505 Games         0.02
## 412  2015         Action                  Tecmo Koei         0.03
## 413  2017       Adventure                 NIS America        0.08
## 414  2015     Role-Playing          Namco Bandai Games       0.00
## 415  2017           Misc                   Ubisoft          0.10
## 416  2017       Adventure Warner Bros. Interactive Entertainment 0.06
## 417  2016     Role-Playing          Namco Bandai Games       0.00
## 418  2017        Strategy                  System 3          0.09
## 419  2017       Adventure               Telltale Games       0.09
```

```
## 420  2016 Action-Adventure                      THQ Nordic      0.07
## 421  2016         Platform                      Deep Silver      0.09
## 422  2017         Adventure                        GameTrust      0.09
## 423  2018           Racing                  Milestone S.r.l.      0.08
## 424  2016       Simulation              Namco Bandai Games      0.00
## 425  2015     Role-Playing                      NIS America      0.03
## 426  2016         Strategy              Namco Bandai Games      0.00
## 427  2017         Adventure                        Grey Box      0.02
## 428  2016             Misc              Namco Bandai Games      0.00
## 429  2016           Action              Namco Bandai Games      0.00
## 430  2015          Shooter                      D3Publisher      0.00
## 431  2014          Shooter                  Devolver Digital      0.00
## 432  2016           Action                          Ubisoft      0.02
## 433  2016         Platform                          Capcom      0.09
## 434  2017           Action              Namco Bandai Games      0.08
## 435  2016     Role-Playing        Nihon Falcom Corporation      0.05
## 436  2017       Simulation                        505 Games      0.04
## 437  2015           Action                      Tecmo Koei      0.03
## 438  2017           Action                      Tecmo Koei      0.03
## 439  2017           Action                          Capcom      0.06
## 440  2017              MMO                      Square Enix      0.07
## 441  2015           Action                          Capcom      0.01
## 442  2014           Puzzle                            Sega      0.05
## 443  2014     Role-Playing                      NIS America      0.05
## 444  2017         Strategy                    Kalypso Media      0.05
## 445  2017           Action              Namco Bandai Games      0.00
## 446  2017          Shooter              Bethesda Softworks      0.08
## 447  2017         Fighting                            PQube      0.04
## 448   N/A         Fighting                                        0.00
## 449  2015            Music                      Ravenscourt      0.08
## 450  2016 Action-Adventure                          Capcom      0.07
## 451  2017           Action                      Tecmo Koei      0.04
## 452  2016     Role-Playing          Focus Home Interactive      0.04
## 453  2015           Action                      Tecmo Koei      0.04
## 454  2017            Music              Namco Bandai Games      0.00
## 455  2016         Strategy                      Tecmo Koei      0.03
## 456  2015         Strategy                    Kalypso Media      0.00
## 457  2017           Sports            Tru Blu Entertainment      0.00
## 458  2015           Action                          Ubisoft      0.07
## 459  2015           Action              Namco Bandai Games      0.00
## 460  2016           Action  Sony Interactive Entertainment      0.07
## 461  2016     Role-Playing                      Gaijinworks      0.03
## 462  2016     Role-Playing        Idea Factory International      0.04
## 463  2016          Shooter                Gearbox Software      0.07
## 464  2017           Racing                      Funbox Media      0.07
## 465  2015     Role-Playing                      Tecmo Koei      0.00
## 466  2014           Action                      Square Enix      0.00
## 467   N/A     Role-Playing                                        0.00
## 468  2016           Action                        Activision      0.07
## 469  2016         Adventure                        Microids      0.05
## 470  2016         Platform                      Xseed Games      0.06
## 471  2015          Shooter                            PQube      0.05
## 472  2017         Adventure                    Badland Studio      0.05
## 473  2015           Action                    Nordic Games      0.03
## 474  2016             Misc                          Ubisoft      0.07
## 475  2016         Adventure                    Maximum Games      0.05
```

```
## 476  2017     Simulation                               GameMill  0.06
## 477  2016   Role-Playing                             Tecmo Koei  0.02
## 478  2016         Action                                 Capcom  0.04
## 479  2016         Racing                              505 Games  0.00
## 480  2016         Action                                  PQube  0.05
## 481  2016         Racing                                  PQube  0.03
## 482  2017   Role-Playing                             NIS America  0.03
## 483  2016         Action                                 Capcom  0.05
## 484  2017   Role-Playing                    Nippon Ichi Software  0.03
## 485  2016         Action                             Tecmo Koei  0.02
## 486  2016   Role-Playing                            Square Enix  0.00
## 487  2017         Action                              GameTrust  0.06
## 488  2017           Misc                            Square Enix  0.00
## 489  2017         Action                 Focus Home Interactive  0.06
## 490  2016         Action                                 Capcom  0.04
## 491  2015      Adventure                            Nordic Games  0.00
## 492  2016        Shooter                             NIS America  0.06
## 493  2017      Adventure Warner Bros. Interactive Entertainment  0.06
## 494  2017   Visual Novel                             NIS America  0.05
## 495  2017        Shooter                      Bigben Interactive  0.06
## 496  2017         Racing                      Bigben Interactive  0.06
## 497  2016         Action                     Namco Bandai Games  0.00
## 498  2017     Simulation                 Focus Home Interactive  0.00
## 499  2017 Action-Adventure                    Namco Bandai Games  0.00
## 500  2017         Action                            Aksys Games  0.04
## 501  2015      Adventure                    Revolution Software  0.00
## 502  2014         Action                              505 Games  0.00
## 503  2016         Action                         Games Workshop  0.03
## 504  2017      Adventure                         Telltale Games  0.05
## 505  2016           Misc                                  Atari  0.05
## 506  2015         Action                           Nordic Games  0.00
## 507  2015      Adventure                                  PQube  0.00
## 508  2016         Action                                Ubisoft  0.00
## 509  2015   Role-Playing                            Deep Silver  0.00
## 510  2016         Sports                         Maximum Games  0.05
## 511  2016         Sports                             Tecmo Koei  0.00
## 512  2017           Misc                             NIS America  0.05
## 513  2017         Sports                             Koch Media  0.05
## 514  2017           Misc                                Nicalis  0.05
## 515  2016      Adventure                      Bigben Interactive  0.05
## 516  2017   Role-Playing                             Tecmo Koei  0.03
## 517  2015         Sports                           Nordic Games  0.00
## 518  2017         Racing                             THQ Nordic  0.05
## 519  2015   Role-Playing                     Namco Bandai Games  0.00
## 520  2017         Action                          Ready at Dawn  0.05
## 521  2014       Strategy                             Tecmo Koei  0.00
## 522  2017   Role-Playing                            Square Enix  0.00
## 523  2017         Action                             NIS America  0.02
## 524  2015      Adventure                         Telltale Games  0.05
## 525  2016           Misc                                  Atari  0.05
## 526  2017      Adventure                         Maximum Games  0.05
## 527  2016         Action                         Maximum Games  0.05
## 528  2015         Sports                      Bigben Interactive  0.00
## 529  2018         Action                         Maximum Games  0.05
## 530  2015         Sports                     Big Ben Interactive  0.00
## 531  2015   Role-Playing                            Aksys Games  0.02
```

```
## 532  2016       Adventure                   Activision    0.05
## 533  2017          Action                   THQ Nordic    0.03
## 534  2017        Strategy                     Sold Out    0.04
## 535  2017    Role-Playing                   THQ Nordic    0.03
## 536  2015          Racing            Bigben Interactive    0.00
## 537  2017       Adventure                   THQ Nordic    0.04
## 538  2017          Action                   NIS America    0.04
## 539  2015    Role-Playing                  Nordic Games    0.04
## 540  2017         Shooter  Sony Interactive Entertainment 0.04
## 541  2018 Action-Adventure                    505 Games   0.03
## 542  2017        Platform                     Accolade    0.04
## 543  2015        Fighting          Marvelous Interactive  0.01
## 544  2014        Strategy                   Tecmo Koei    0.04
## 545  2014    Role-Playing                      Ubisoft    0.00
## 546  2017    Role-Playing                         Sega    0.00
## 547  2015          Action                  Deep Silver    0.00
## 548  2016            Misc                      Ubisoft    0.04
## 549  2017    Role-Playing                   NIS America    0.04
## 550  2017      Simulation                     Soedesco    0.04
## 551  2016        Strategy            Team17 Digital Ltd    0.02
## 552  2017       Adventure                     Microids    0.04
## 553  2016          Action                       Capcom    0.00
## 554  2015          Action                       Capcom    0.00
## 555  2016          Racing                Milestone S.r.l  0.00
## 556  2018       Adventure                    505 Games    0.04
## 557  2016          Racing                     GameMill    0.04
## 558  2016      Simulation          Introversion Software  0.02
## 559  2016         Shooter            Rising Star Games    0.04
## 560  2016       Adventure                   NIS America    0.04
## 561  2016          Action                     Sold Out    0.04
## 562  2017          Action               Outright Games    0.04
## 563  2017         Shooter                Maximum Games    0.04
## 564  2017         Shooter                Maximum Games    0.04
## 565  2017           Party  Sony Interactive Entertainment 0.04
## 566  2017         Shooter                    505 Games    0.04
## 567  2015    Role-Playing       Idea Factory International 0.00
## 568  2017       Adventure                  Aksys Games    0.03
## 569  2016          Sports          Alternative Software   0.00
## 570  2017          Action                Kalypso Media    0.03
## 571  2017        Platform                    505 Games    0.04
## 572  2015          Puzzle          Nighthawk Interactive  0.00
## 573  2017    Role-Playing                Compile Heart    0.01
## 574  2016          Sports                      MLB.com    0.04
## 575  2018      Simulation                     Techland    0.02
## 576  2016      Simulation          Nighthawk Interactive  0.03
## 577  2016          Action                    Avanquest    0.01
## 578  2017          Action                Badland Studio   0.03
## 579  2017          Action                  Merge Games    0.03
## 580  2016       Adventure  Sony Interactive Entertainment 0.00
## 581  2017        Fighting             Arc System Works    0.01
## 582  2016          Action                Maximum Games    0.03
## 583  2017          Action             CokeM Interactive   0.03
## 584  2015 Action-Adventure                     Ubisoft    0.00
## 585  2015        Fighting           Namco Bandai Games    0.00
## 586  2017        Strategy                Kalypso Media    0.03
## 587  2014          Sports         Focus Home Interactive  0.00
```

```
## 588   2017        Shooter                   NIS America    0.03
## 589   2016         Action                         PQube    0.03
## 590   2016          Music                       Ubisoft    0.03
## 591   2018       Platform                       Nicalis    0.03
## 592   2016         Puzzle             Rising Star Games    0.03
## 593   2017      Adventure                     505 Games    0.03
## 594   2017       Strategy                 Kalypso Media    0.02
## 595   2018   Role-Playing                   Merge Games    0.02
## 596   2017         Sports                       MLB.com    0.03
## 597   2015      Adventure                           5pb    0.03
## 598   2017         Racing                    Perp Games    0.03
## 599   2016        Shooter                        Capcom    0.00
## 600   2016         Puzzle         Nighthawk Interactive    0.03
## 601   2015           Misc            Namco Bandai Games    0.00
## 602   2014         Action   Sony Computer Entertainment    0.00
## 603   2017         Action                 UFO Interactive    0.02
## 604   2015       Platform                    Activision    0.00
## 605   2016   Role-Playing                    THQ Nordic    0.03
## 606   2016       Strategy                    Tecmo Koei    0.00
## 607   2016     Simulation                    Tecmo Koei    0.00
## 608   2016         Action                        Capcom    0.00
## 609   2017         Action          Nippon Ichi Software    0.01
## 610   2016         Action             Wired Productions    0.02
## 611   2015       Fighting                          Sega    0.00
## 612   2017         Action                Maximum Games    0.02
## 613   2017      Adventure                 Kalypso Media    0.02
## 614   2017         Action               Kadokawa Games    0.01
## 615   2017           Misc                    Tecmo Koei    0.00
## 616   2016       Fighting                          Yeti    0.00
## 617   2017         Racing                Maximum Games    0.02
## 618   2017           Misc                    Tecmo Koei    0.00
## 619   2016         Sports                     Avanquest    0.00
## 620   2016           Misc            Namco Bandai Games    0.00
## 621   2016         Puzzle         Nighthawk Interactive    0.02
## 622   2017       Strategy                 Kalypso Media    0.02
## 623   2017         Racing                    THQ Nordic    0.02
## 624   2016         Action            Namco Bandai Games    0.00
## 625   2016         Action                    Activision    0.02
## 626   2016          Music                    THQ Nordic    0.02
## 627   2016      Adventure          Nippon Ichi Software    0.00
## 628   2017      Adventure             Wired Productions    0.02
## 629   2016       Platform                 Badland Studio    0.02
## 630   2017       Fighting            Namco Bandai Games    0.00
## 631    N/A         Action                                 0.00
## 632   2017   Visual Novel                        Sprite    0.00
## 633   2017      Adventure                    Aksys Games    0.02
## 634   2017   Role-Playing                      Soedesco    0.02
## 635   2016   Visual Novel                         PQube    0.00
## 636   2017         Action                   NIS America    0.02
## 637   2017           Misc                      Soedesco    0.02
## 638   2014   Role-Playing                  Compile Heart    0.00
## 639   2017        Shooter                   NIS America    0.02
## 640   2016         Action            Namco Bandai Games    0.00
## 641   2015         Sports         Tru Blu Entertainment    0.00
## 642   2017   Role-Playing                    D3Publisher    0.00
## 643   2017   Role-Playing                   Square Enix    0.00
```

```
## 644   2017         Music                        PM Studios   0.02
## 645   2016 Action-Adventure     Gunho Online Entertainment   0.00
## 646   2016       Shooter   Sony Interactive Entertainment   0.00
## 647   2017        Racing                         505 Games   0.02
## 648   2016 Action-Adventure                         Capcom   0.00
## 649   2016        Action             Namco Bandai Games   0.00
## 650   2017         Music   Sony Interactive Entertainment   0.00
## 651   2016        Action              Rising Star Games   0.02
## 652   2016       Shooter          GameMill Entertainment   0.02
## 653   2016   Role-Playing                  Kalypso Media   0.02
## 654   2017        Puzzle                       Soedesco   0.02
## 655   2017      Strategy   Sony Interactive Entertainment   0.00
## 656   2017      Strategy                 Maximum Games   0.02
## 657   2016        Action                Stainless Games   0.02
## 658   2018      Strategy                League of Geeks   0.02
## 659   2018        Action              Wired Productions   0.02
## 660   2017         Music   Sony Interactive Entertainment   0.00
## 661   2016        Action                         Capcom   0.00
## 662   2015        Action             Namco Bandai Games   0.00
## 663   2015        Action                    D3Publisher   0.00
## 664   2017        Puzzle                  Kalypso Media   0.02
## 665   2016          Misc              Rising Star Games   0.02
## 666   2017  Visual Novel                            5pb   0.00
## 667   2016          Misc             Namco Bandai Games   0.00
## 668   2017   Role-Playing                  Compile Heart   0.00
## 669   2016      Fighting               Arc System Works   0.00
## 670   2017    Simulation                      THQ Nordic   0.01
## 671   2014          Misc                         Ubisoft   0.00
## 672   2017        Racing              Bigben Interactive   0.01
## 673   2015  Visual Novel                           PQube   0.00
## 674   2016      Fighting                      Mediascape   0.00
## 675   2017       Shooter                       Rebellion   0.01
## 676   2015       Shooter          Focus Home Interactive   0.00
## 677   2017        Action                       Soedesco   0.01
## 678   2017        Action                           PQube   0.00
## 679   2017   Role-Playing                       Techland   0.01
## 680   2017        Action                         GungHo   0.00
## 681   2017     Adventure             Namco Bandai Games   0.00
## 682   2015   Role-Playing             TopWare Interactive   0.00
## 683   2017     Adventure                            5pb   0.00
## 684   2017      Strategy           Nippon Ichi Software   0.00
## 685   2017          Misc               Arc System Works   0.00
## 686   2016      Strategy                   Nordic Games   0.01
## 687   2017   Role-Playing                         Capcom   0.00
## 688   2017     Adventure                            5pb   0.00
## 689   2017     Adventure                            5pb   0.00
## 690   2016      Strategy                             M2   0.00
## 691   2017     Adventure                            5pb   0.00
## 692   2016    Simulation              UIG Entertainment   0.00
## 693   2017     Adventure                            5pb   0.00
## 694   2016        Action              Rising Star Games   0.00
## 695   2017        Racing          Nighthawk Interactive   0.01
## 696   2016       Shooter                       Soedesco   0.00
## 697   2017  Visual Novel                            5pb   0.00
## 698   2016        Racing                           PQube   0.01
## 699   2017      Platform   Sony Interactive Entertainment   0.00
```

```
## 700  2017      Strategy                       THQ Nordic        0.01
## 701  2015        Action                            PQube        0.00
## 702  2015        Action         Namco Bandai Games              0.00
## 703  2017     Adventure                          Acquire        0.00
## 704  2017     Adventure                    Compile Heart        0.00
## 705  2017      Strategy                    Kalypso Media         0.01
## 706  2015        Action                       Tecmo Koei        0.00
## 707  2017        Action         Namco Bandai Games              0.00
## 708  2017   Role-Playing        Active Gaming Media             0.00
## 709  2014      Platform                       Rain Games        0.00
## 710  2017        Action                   Kadokawa Games        0.00
## 711  2016        Action                  Team17 Software        0.00
## 712  2016      Platform                        Team Meat        0.00
## 713  2015        Sports         Focus Home Interactive          0.00
## 714  2016          Misc                    Thekla, Inc.         0.00
## 715  2015        Action    Sony Computer Entertainment          0.00
## 716  2017     Adventure          Nippon Ichi Software           0.00
## 717  2017     Adventure                        Entergram        0.00
## 718  2017        Action                        DMM Games        0.00
## 719  2017     Adventure          Nippon Ichi Software           0.00
## 720  2016        Sports    Sony Interactive Entertainment       0.00
## 721  2016        Puzzle                       Two Tribes        0.00
## 722  2015        Action                       Tecmo Koei        0.00
## 723  2017        Action                     Square Enix         0.00
## 724  2015        Action                   Spike Chunsoft        0.00
## 725  N/A       Platform                                         0.00
## 726  2016     Adventure                         Microids        0.00
## 727  2016      Platform                       Koch Media        0.00
## 728  N/A      Adventure                                         0.00
## 729  N/A       Platform                                         0.00
## 730  N/A         Action                                         0.00
## 731  2013          Misc    Perfect World Entertainment          0.00
## 732  2015        Action                          BioWare        0.00
## 733  2019       Shooter                          Ubisoft        0.00
## 734  N/A           Misc                                         0.00
## 735  N/A      Adventure                                         0.00
## 736  N/A   Role-Playing                                         0.00
## 737  2013           MMO        Sony Online Entertainment        0.00
## 738  N/A           Misc                                         0.00
## 739  N/A           Misc                                         0.00
## 740  N/A      Adventure                                         0.00
## 741  2017      Strategy                   UIG Entertainment     0.00
## 742  N/A           Misc                                         0.00
## 743  2014          Misc                          Unknown        0.00
## 744  N/A           Misc                                         0.00
## 745  N/A      Adventure                                         0.00
## 746  N/A        Shooter                                         0.00
## 747  2016   Role-Playing                      Taleworlds        0.00
## 748  N/A   Role-Playing                                         0.00
## 749  N/A           Misc                                         0.00
## 750  N/A        Shooter                                         0.00
## 751  2017        Action    Sony Interactive Entertainment       0.00
## 752  2016        Action                           Capcom        0.00
## 753  N/A           Misc                                         0.00
## 754  N/A   Role-Playing                                         0.00
## 755  N/A           Misc                                         0.00
```

```
## 756  2014            Misc                           Activision       0.00
## 757   N/A        Fighting                                            0.00
## 758   N/A       Adventure                                            0.00
## 759  2015       Adventure                             Soedesco       0.00
## 760  2016          Action   Sony Interactive Entertainment           0.00
## 761  2016          Action   Sony Interactive Entertainment           0.00
## 762   N/A     Role-Playing                                           0.00
## 763  2016          Action   Sony Interactive Entertainment           0.00
## 764   N/A            Misc                                            0.00
## 765  2014            Misc                    DTP Entertainment        0.00
## 766   N/A        Platform                                            0.00
## 767   N/A        Fighting                                            0.00
## 768   N/A       Adventure                                            0.00
## 769   N/A            Misc                                            0.00
## 770   N/A         Shooter                                            0.00
## 771   N/A            Misc                                            0.00
## 772   N/A     Role-Playing                                           0.00
## 773   N/A       Adventure                                            0.00
## 774   N/A            Misc                                            0.00
## 775  2015       Adventure                          Nordic Games      0.00
## 776   N/A        Platform                                            0.00
## 777   N/A     Role-Playing                                           0.00
## 778  2015       Adventure                               Unknown      0.00
## 779  2020            Misc                                Capcom      0.00
## 780   N/A          Action                                            0.00
## 781   N/A       Adventure                                            0.00
## 782  2015            Misc                               Unknown      0.00
## 783  2020            Misc Warner Bros. Interactive Entertainment     0.00
## 784  2018 Action-Adventure              CD Projekt Red Studio        0.00
## 785  2020            Misc                           Square Enix      0.00
## 786   N/A     Role-Playing                                           0.00
## 787   N/A            Misc                                            0.00
## 788   N/A            Misc                                            0.00
## 789  2013            Misc                     Compulsion Games        0.00
## 790   N/A          Action                                            0.00
## 791  2015            Misc                      Stainless Games        0.00
## 792  2020            Misc                               Unknown      0.00
## 793  2020            Misc                               Unknown      0.00
## 794   N/A            Misc                                            0.00
## 795   N/A       Adventure                                            0.00
## 796   N/A          Action                                            0.00
## 797   N/A            Misc                                            0.00
## 798   N/A            Misc                                            0.00
## 799   N/A     Role-Playing                                           0.00
## 800   N/A          Action                                            0.00
## 801   N/A          Puzzle                                            0.00
## 802   N/A            Misc                                            0.00
## 803   N/A          Puzzle                                            0.00
## 804  2019     Role-Playing                           Square Enix      0.00
## 805   N/A            Misc                                            0.00
## 806   N/A            Misc                                            0.00
## 807   N/A            Misc                                            0.00
## 808   N/A          Action                                            0.00
## 809   N/A            Misc                                            0.00
## 810  2014            Misc                            Tecmo Koei       0.00
## 811   N/A            Misc                                            0.00
```

```
## 812   N/A         Puzzle                                                   0.00
## 813   N/A           Misc                                                   0.00
## 814   N/A           Misc                                                   0.00
## 815   N/A           Misc                                                   0.00
## 816   N/A           Misc                                                   0.00
## 817  2013           Misc                      FarSight Studios             0.00
## 818  2014         Action                         Tecmo Koei                0.00
## 819  2016       Strategy                           Soedesco                0.00
## 820  2014       Platform                            Capcom                 0.00
## 821   N/A         Action                                                   0.00
## 822  2019            MMO              Sony Online Entertainment             0.00
## 823   N/A           Misc                                                   0.00
## 824   N/A           Misc                                                   0.00
## 825   N/A     Simulation                                                   0.00
## 826   N/A         Action                                                   0.00
## 827   N/A           Misc                                                   0.00
## 828   N/A       Platform                                                   0.00
## 829   N/A      Adventure                                                   0.00
## 830   N/A           Misc                                                   0.00
## 831   N/A         Action                                                   0.00
## 832   N/A           Misc                                                   0.00
## 833   N/A           Misc                                                   0.00
## 834   N/A           Misc                                                   0.00
## 835  2014         Action                          Futurlab 1               0.00
## 836  2015         Action        Sony Computer Entertainment                0.00
## 837   N/A        Shooter                                                   0.00
## 838   N/A      Adventure                                                   0.00
## 839   N/A         Action                                                   0.00
## 840   N/A           Misc                                                   0.00
## 841   N/A Action-Adventure                                                 0.00
## 842  2014           Misc                            Level 5                0.00
## 843  2014           Misc                     Nowhere Studios               0.00
## 844   N/A           Misc                                                   0.00
## 845   N/A           Misc                                                   0.00
## 846   N/A         Puzzle                                                   0.00
## 847   N/A           Misc                                                   0.00
## 848  2014           Misc                            GungHo                 0.00
## 849   N/A           Misc                                                   0.00
## 850   N/A         Sports                                                   0.00
## 851   N/A           Misc                                                   0.00
## 852   N/A           Misc                                                   0.00
## 853   N/A           Misc                                                   0.00
## 854   N/A           Misc                                                   0.00
## 855   N/A      Adventure                                                   0.00
## 856   N/A      Adventure                                                   0.00
## 857   N/A           Misc                                                   0.00
## 858  2015           Misc                           Unknown                 0.00
## 859   N/A           Misc                                                   0.00
## 860   N/A           Misc                                                   0.00
## 861   N/A           Misc                                                   0.00
## 862   N/A         Action                                                   0.00
## 863   N/A           Misc                                                   0.00
## 864   N/A           Misc                                                   0.00
## 865   N/A           Misc                                                   0.00
## 866  2014           Misc                           Unknown                 0.00
## 867   N/A      Adventure                                                   0.00
```

```
## 868   N/A      Role-Playing                                           0.00
## 869   N/A          Misc                                               0.00
## 870   N/A          Misc                                               0.00
## 871   N/A          Misc                                               0.00
## 872   2015         Misc                    Frictional Games           0.00
## 873   2015         Misc                        Renegade Kid           0.00
## 874   N/A       Adventure                                             0.00
## 875   2014         Misc                            MLB.com            0.00
## 876   N/A          Misc                                               0.00
## 877   N/A        Shooter                                              0.00
## 878   2014         Misc                Focus Home Interactive         0.00
## 879   N/A          Misc                                               0.00
## 880   N/A          Misc                                               0.00
## 881   N/A          Misc                                               0.00
## 882   N/A         Puzzle                                              0.00
## 883   N/A          Misc                                               0.00
## 884   N/A          Misc                                               0.00
## 885   N/A       Adventure                                             0.00
## 886   N/A         Action                                              0.00
## 887   N/A          Misc                                               0.00
## 888   N/A          Misc                                               0.00
## 889   N/A          Misc                                               0.00
## 890   N/A          Misc                                               0.00
## 891   N/A          Misc                                               0.00
## 892   2014         Misc                   Triniti Interactive         0.00
## 893   2016         Misc                             Unknown           0.00
## 894   N/A       Adventure                                             0.00
## 895   N/A          Misc                                               0.00
## 896   N/A        Platform                                             0.00
## 897   2014         Misc                           3D Realms           0.00
## 898   N/A        Platform                                             0.00
## 899   2015        Action               Endnight Games Ltd\xca         0.00
## 900   N/A          Misc                                               0.00
## 901   N/A         Action                                              0.00
## 902   N/A       Adventure                                             0.00
## 903   N/A      Role-Playing                                           0.00
## 904   N/A         Action                                              0.00
## 905   2015     Role-Playing                   Little Orbit            0.00
## 906   N/A      Role-Playing                                           0.00
## 907   N/A        Shooter                                              0.00
## 908   N/A         Action                                              0.00
## 909   2015        Sports                        EA Sports             0.00
## 910   2017        Action                       Deep Silver            0.00
## 911   N/A         Action                                              0.00
## 912   N/A         Action                                              0.00
## 913   N/A        Platform                                             0.00
## 914   N/A         Action                                              0.00
## 915   N/A         Action                                              0.00
## 916   N/A       Adventure                                             0.00
## 917   2014        Puzzle                          Ubisoft            0.00
## 918   2015        Action                        Versus Evil          0.00
## 919   2014        Action                        Activision           0.00
## 920   2015      Adventure                      The Astronauts         0.00
## 921   2014        Action                   Namco Bandai Games         0.00
## 922   2020        Racing          Sony Computer Entertainment         0.00
## 923   N/A      Role-Playing                                           0.00
```

```
## 924   N/A         Action                                                      0.00
## 925   N/A         Action                                                      0.00
## 926   N/A         Action                                                      0.00
## 927   N/A      Adventure                                                      0.00
## 928   N/A         Puzzle                                                      0.00
## 929   N/A         Action                                                      0.00
## 930   N/A         Action                                                      0.00
## 931   N/A       Strategy                                                      0.00
## 932   N/A         Action                                                      0.00
## 933   N/A        Shooter                                                      0.00
## 934  2019      Adventure         Sony Interactive Entertainment               0.00
## 935   N/A        Shooter                                                      0.00
## 936   N/A        Shooter                                                      0.00
## 937   N/A         Action                                                      0.00
## 938   N/A       Strategy                                                      0.00
## 939   N/A         Action                                                      0.00
## 940   N/A         Action                                                      0.00
## 941   N/A         Action                                                      0.00
## 942   N/A         Action                                                      0.00
## 943   N/A      Adventure                                                      0.00
## 944  2014      Adventure                          Deep Silver                 0.00
## 945   N/A         Action                                                      0.00
## 946  2016         Sports                                PQube                 0.00
## 947  2015      Adventure                      Ice-pick Lodge                  0.00
## 948   N/A         Action                                                      0.00
## 949  2015    Role-Playing                 Double Damage Games                 0.00
## 950   N/A     Simulation                                                      0.00
## 951   N/A        Shooter                                                      0.00
## 952   N/A        Shooter                                                      0.00
## 953  2015         Action                              Ubisoft                 0.00
## 954  2020         Action     Konami Digital Entertainment                     0.00
## 955   N/A    Role-Playing                                                     0.00
## 956   N/A        Shooter                                                      0.00
## 957   N/A      Adventure                                                      0.00
## 958   N/A         Action                                                      0.00
## 959   N/A         Action                                                      0.00
## 960   N/A         Action                                                      0.00
## 961   N/A        Shooter                                                      0.00
## 962   N/A        Shooter                                                      0.00
## 963   N/A       Platform                                                      0.00
## 964   N/A         Action                                                      0.00
## 965   N/A Action-Adventure                                                    0.00
## 966   N/A           Misc                                                      0.00
## 967   N/A       Platform                                                      0.00
## 968   N/A         Action                                                      0.00
## 969   N/A      Adventure                                                      0.00
## 970   N/A       Platform                                                      0.00
## 971   N/A       Platform                                                      0.00
## 972   N/A         Action                                                      0.00
## 973   N/A         Action                                                      0.00
## 974  2015         Action                          Codemasters                 0.00
## 975  2015         Sports                             MLB.com                  0.00
## 976   N/A       Strategy                                                      0.00
## 977  2015    Role-Playing                          Wander MMO                 0.00
## 978   N/A         Action                                                      0.00
## 979   N/A      Adventure                                                      0.00
```

```
## 980   N/A      Platform                                                0.00
## 981   N/A      Action                                                  0.00
## 982   2019     Role-Playing                      Square Enix           0.00
## 983   2016     Role-Playing                      Square Enix           0.00
## 984   2020     Role-Playing                             Gust           0.00
## 985   2015     Action                                   Sega           0.00
## 986   2015     Action         Konami Digital Entertainment             0.00
## 987   N/A      Adventure                                               0.00
## 988   2017     Role-Playing                         Sinxsoft           0.00
## 989   2019     Platform                             Cygames           0.00
## 990   2016     Action                               Unknown           0.00
## 991   N/A      Music                                                  0.00
## 992   2014     Action                               Unknown           0.00
## 993   2016     Shooter        Sony Computer Entertainment             0.00
## 994   2015     Role-Playing                     Deep Silver           0.00
## 995   2015     Simulation                     Kalypso Media           0.00
## 996   2016     Role-Playing                   Kadokawa Games           0.00
## 997   2015     Misc                                 Ubisoft           0.00
## 998   2015     Simulation               Namco Bandai Games             0.00
## 999   2016     Action                       Maximum Games             0.00
## 1000  2015     Action                         Little Orbit             0.00
## 1001  N/A      Adventure                                               0.00
## 1002  N/A      Action                                                  0.00
## 1003  N/A      Role-Playing                                            0.00
## 1004  N/A      Misc                                                    0.00
## 1005  2015     Role-Playing   Sony Computer Entertainment             0.00
## 1006  N/A      Action                                                  0.00
## 1007  N/A      Sports                                                  0.00
## 1008  N/A      Action                                                  0.00
## 1009  2017 Action-Adventure                         Soedesco           0.00
## 1010  N/A      Action                                                  0.00
## 1011  N/A      Action                                                  0.00
## 1012  N/A      Action                                                  0.00
## 1013  N/A      Action                                                  0.00
## 1014  2019 Action-Adventure    Sony Interactive Entertainment         0.00
## 1015  2016     Action                           Tecmo Koei           0.00
## 1016  2016     Platform                               PQube           0.00
## 1017  2019     Action         Sony Interactive Entertainment         0.00
## 1018  2016     Sports         Tru Blu Entertainment                   0.00
## 1019  2019     Shooter             Bandai Namco Games                 0.00
## 1020  N/A      Action                                                  0.00
## 1021  2019     Shooter                         Deep Silver           0.00
## 1022  2019     Role-Playing                 Electronic Arts           0.00
## 1023  2017     Role-Playing                         Unknown           0.00
## 1024  2018     Strategy                             Unknown           0.00
## 1025  2018     Action                             THQ Nordic           0.00
## 1026  2019     Action                             THQ Nordic           0.00
## 1027  2017     Platform                           THQ Nordic           0.00
## 1028  2017     Adventure           Daedalic Entertainment             0.00
## 1029  2018     Action         Bandai Namco Entertainment             0.00
## 1030  N/A      Role-Playing                                            0.00
## 1031  2017     Racing                         Tammeka Games           0.00
## 1032  N/A      Action                                                  0.00
## 1033  N/A      Action                                                  0.00
## 1034  N/A      Action                                                  0.00
##        Europe Japan Rest.of.World Global
```

```
## 1      9.71   0.60      3.02   19.39
## 2      6.05   0.41      2.44   15.09
## 3      6.21   0.21      2.26   13.94
## 4      6.21   0.40      2.12   13.40
## 5      8.64   0.15      1.73   11.80
## 6      7.95   0.12      1.61   10.94
## 7      3.93   0.21      1.70   10.33
## 8      3.39   0.32      1.41    8.76
## 9      3.83   0.19      1.36    8.48
## 10     3.97   0.27      1.34    8.48
## 11     5.77   0.07      1.23    8.22
## 12     3.19   0.23      1.30    8.03
## 13     3.34   0.14      1.22    7.53
## 14     3.65   0.29      1.12    7.26
## 15     2.86   0.11      1.10    6.77
## 16     3.13   0.35      0.96    6.33
## 17     4.49   0.05      0.94    6.32
## 18     2.17   0.13      1.02    6.15
## 19     2.43   0.28      0.92    5.82
## 20     2.13   0.16      0.94    5.76
## 21     2.11   0.10      0.94    5.70
## 22     2.82   0.28      0.81    5.39
## 23     1.53   1.05      0.68    5.07
## 24     2.92   0.07      0.74    4.83
## 25     1.06   2.17      0.42    4.67
## 26     1.80   0.17      0.73    4.54
## 27     1.99   0.12      0.73    4.53
## 28     2.04   0.16      0.69    4.37
## 29     2.06   0.36      0.64    4.36
## 30     2.13   0.11      0.68    4.32
## 31     1.64   0.05      0.69    4.17
## 32     2.16   0.09      0.65    4.14
## 33     1.44   0.10      0.69    4.14
## 34     1.68   0.11      0.66    4.11
## 35     2.11   0.11      0.63    4.06
## 36     2.14   0.11      0.63    4.06
## 37     0.66   0.05      0.71    3.98
## 38     1.73   0.15      0.62    3.95
## 39     1.74   0.19      0.62    3.94
## 40     2.35   0.24      0.54    3.77
## 41     2.06   0.08      0.55    3.60
## 42     0.59   0.03      0.63    3.52
## 43     0.94   0.00      0.61    3.49
## 44     2.18   0.12      0.51    3.43
## 45     1.50   0.08      0.54    3.36
## 46     1.74   0.12      0.52    3.36
## 47     0.57   0.04      0.59    3.34
## 48     1.56   0.41      0.46    3.31
## 49     0.31   0.00      0.61    3.30
## 50     0.37   0.00      0.60    3.28
## 51     1.60   0.05      0.51    3.19
## 52     1.55   0.06      0.51    3.19
## 53     1.35   0.22      0.47    3.12
## 54     1.05   0.28      0.48    3.11
## 55     1.15   0.50      0.42    3.04
## 56     1.58   0.08      0.47    3.02
```

```
## 57    1.09  0.07      0.50  3.01
## 58    1.48  0.04      0.46  2.92
## 59    1.67  0.04      0.44  2.87
## 60    1.48  0.08      0.44  2.82
## 61    1.61  0.07      0.41  2.73
## 62    1.66  0.06      0.41  2.72
## 63    0.42  0.00      0.47  2.62
## 64    0.55  0.01      0.44  2.49
## 65    0.74  0.13      0.40  2.45
## 66    0.63  0.44      0.34  2.42
## 67    0.97  0.06      0.39  2.38
## 68    1.63  0.02      0.36  2.37
## 69    1.38  0.04      0.36  2.37
## 70    0.80  0.08      0.38  2.34
## 71    0.97  0.04      0.37  2.26
## 72    0.25  0.00      0.41  2.25
## 73    1.18  0.04      0.34  2.18
## 74    0.80  0.05      0.36  2.18
## 75    1.04  0.03      0.35  2.17
## 76    1.40  0.09      0.32  2.16
## 77    0.97  0.14      0.33  2.15
## 78    1.08  0.05      0.32  2.07
## 79    0.93  0.01      0.34  2.06
## 80    0.98  0.00      0.33  2.05
## 81    0.84  0.06      0.33  2.04
## 82    0.22  1.43      0.10  2.04
## 83    1.34  0.00      0.31  2.02
## 84    1.07  0.09      0.30  1.98
## 85    1.02  0.01      0.31  1.97
## 86    1.00  0.01      0.30  1.91
## 87    0.92  0.06      0.30  1.90
## 88    0.77  0.42      0.23  1.88
## 89    0.90  0.11      0.28  1.86
## 90    1.04  0.03      0.27  1.79
## 91    0.51  0.23      0.26  1.75
## 92    0.66  0.07      0.28  1.75
## 93    0.62  0.06      0.28  1.72
## 94    0.54  0.00      0.29  1.72
## 95    0.51  0.42      0.22  1.71
## 96    0.72  0.12      0.26  1.70
## 97    0.34  0.48      0.20  1.64
## 98    0.86  0.07      0.25  1.62
## 99    0.84  0.03      0.25  1.61
## 100   0.67  0.12      0.24  1.57
## 101   0.47  0.12      0.24  1.54
## 102   0.35  0.01      0.27  1.54
## 103   0.74  0.06      0.23  1.51
## 104   0.59  0.14      0.23  1.50
## 105   1.05  0.00      0.23  1.50
## 106   0.67  0.00      0.25  1.49
## 107   0.51  0.12      0.23  1.46
## 108   0.57  0.00      0.24  1.43
## 109   0.72  0.01      0.22  1.39
## 110   0.42  0.12      0.22  1.39
## 111   0.58  0.01      0.22  1.36
## 112   0.67  0.00      0.22  1.33
```

```
## 113    0.78   0.02        0.20   1.31
## 114    0.65   0.00        0.21   1.31
## 115    0.58   0.13        0.19   1.29
## 116    0.65   0.00        0.21   1.29
## 117    0.34   0.03        0.22   1.28
## 118    0.76   0.04        0.19   1.28
## 119    0.70   0.00        0.19   1.22
## 120    0.49   0.00        0.20   1.21
## 121    0.50   0.17        0.17   1.20
## 122    0.59   0.05        0.19   1.20
## 123    0.52   0.05        0.19   1.20
## 124    0.25   0.20        0.17   1.20
## 125    0.55   0.14        0.17   1.19
## 126    0.50   0.00        0.20   1.18
## 127    0.56   0.02        0.19   1.18
## 128    0.57   0.00        0.19   1.16
## 129    0.00   0.00        0.22   1.16
## 130    0.72   0.04        0.17   1.14
## 131    0.47   0.01        0.19   1.13
## 132    0.60   0.00        0.18   1.11
## 133    0.43   0.01        0.18   1.11
## 134    0.41   0.16        0.15   1.10
## 135    0.59   0.05        0.16   1.09
## 136    0.00   0.00        0.20   1.06
## 137    0.49   0.09        0.15   1.05
## 138    0.62   0.02        0.16   1.04
## 139    0.33   0.16        0.15   1.04
## 140    0.36   0.20        0.14   1.03
## 141    0.08   0.00        0.19   1.01
## 142    0.60   0.02        0.15   1.01
## 143    0.53   0.01        0.16   1.01
## 144    0.41   0.05        0.16   1.01
## 145    0.35   0.00        0.17   0.98
## 146    0.41   0.01        0.16   0.97
## 147    0.15   0.00        0.17   0.96
## 148    0.00   0.00        0.18   0.96
## 149    0.42   0.00        0.16   0.94
## 150    0.36   0.07        0.14   0.90
## 151    0.31   0.12        0.13   0.89
## 152    0.33   0.02        0.15   0.89
## 153    0.32   0.00        0.15   0.89
## 154    0.68   0.00        0.13   0.88
## 155    0.42   0.00        0.14   0.87
## 156    0.28   0.03        0.14   0.86
## 157    0.41   0.03        0.13   0.85
## 158    0.21   0.00        0.15   0.85
## 159    0.40   0.00        0.14   0.85
## 160    0.52   0.01        0.13   0.85
## 161    0.42   0.05        0.12   0.82
## 162    0.43   0.14        0.10   0.82
## 163    0.29   0.14        0.11   0.81
## 164    0.14   0.39        0.07   0.81
## 165    0.52   0.02        0.12   0.79
## 166    0.23   0.08        0.12   0.79
## 167    0.40   0.02        0.12   0.78
## 168    0.56   0.03        0.11   0.78
```

```
## 169   0.36  0.06       0.11   0.78
## 170   0.45  0.12       0.10   0.76
## 171   0.46  0.01       0.12   0.75
## 172   0.36  0.19       0.09   0.75
## 173   0.25  0.00       0.13   0.75
## 174   0.41  0.18       0.09   0.75
## 175   0.37  0.00       0.12   0.74
## 176   0.00  0.00       0.14   0.73
## 177   0.49  0.00       0.11   0.72
## 178   0.34  0.01       0.12   0.72
## 179   0.32  0.01       0.11   0.71
## 180   0.19  0.04       0.11   0.70
## 181   0.23  0.09       0.10   0.69
## 182   0.10  0.38       0.05   0.69
## 183   0.45  0.04       0.10   0.68
## 184   0.31  0.05       0.10   0.68
## 185   0.17  0.00       0.12   0.67
## 186   0.16  0.00       0.12   0.66
## 187   0.30  0.01       0.11   0.66
## 188   0.10  0.26       0.07   0.65
## 189   0.16  0.19       0.08   0.65
## 190   0.26  0.09       0.09   0.65
## 191   0.39  0.01       0.10   0.64
## 192   0.31  0.00       0.10   0.63
## 193   0.39  0.00       0.10   0.62
## 194   0.21  0.09       0.09   0.62
## 195   0.47  0.02       0.09   0.62
## 196   0.19  0.00       0.11   0.62
## 197   0.47  0.00       0.09   0.61
## 198   0.32  0.00       0.10   0.60
## 199   0.42  0.00       0.09   0.59
## 200   0.30  0.03       0.09   0.58
## 201   0.17  0.24       0.06   0.58
## 202   0.32  0.00       0.09   0.57
## 203   0.25  0.11       0.07   0.57
## 204   0.06  0.00       0.10   0.57
## 205   0.16  0.00       0.10   0.57
## 206   0.22  0.17       0.06   0.56
## 207   0.26  0.02       0.09   0.56
## 208   0.25  0.00       0.09   0.56
## 209   0.31  0.01       0.09   0.56
## 210   0.28  0.00       0.09   0.56
## 211   0.24  0.02       0.09   0.55
## 212   0.25  0.00       0.09   0.55
## 213   0.27  0.00       0.09   0.55
## 214   0.35  0.02       0.08   0.55
## 215   0.18  0.00       0.09   0.52
## 216   0.11  0.00       0.09   0.52
## 217   0.22  0.11       0.06   0.52
## 218   0.30  0.00       0.08   0.51
## 219   0.29  0.04       0.07   0.50
## 220   0.24  0.12       0.06   0.50
## 221   0.30  0.02       0.07   0.49
## 222   0.38  0.04       0.06   0.48
## 223   0.12  0.03       0.08   0.48
## 224   0.16  0.00       0.08   0.48
```

```
## 225    0.09  0.03         0.08   0.48
## 226    0.26  0.03         0.07   0.48
## 227    0.25  0.02         0.07   0.48
## 228    0.13  0.00         0.08   0.47
## 229    0.09  0.30         0.03   0.47
## 230    0.35  0.00         0.07   0.47
## 231    0.25  0.01         0.07   0.47
## 232    0.18  0.00         0.08   0.47
## 233    0.06  0.16         0.05   0.46
## 234    0.09  0.00         0.08   0.45
## 235    0.07  0.21         0.04   0.45
## 236    0.16  0.04         0.07   0.45
## 237    0.13  0.16         0.05   0.45
## 238    0.21  0.00         0.07   0.44
## 239    0.14  0.00         0.08   0.44
## 240    0.18  0.00         0.07   0.43
## 241    0.23  0.01         0.07   0.43
## 242    0.18  0.03         0.06   0.42
## 243    0.21  0.02         0.06   0.42
## 244    0.19  0.03         0.06   0.42
## 245    0.22  0.00         0.07   0.41
## 246    0.13  0.00         0.07   0.41
## 247    0.06  0.12         0.05   0.41
## 248    0.13  0.00         0.07   0.39
## 249    0.00  0.00         0.07   0.39
## 250    0.12  0.02         0.06   0.39
## 251    0.18  0.08         0.05   0.38
## 252    0.16  0.05         0.05   0.37
## 253    0.18  0.07         0.05   0.37
## 254    0.06  0.19         0.03   0.37
## 255    0.19  0.00         0.06   0.37
## 256    0.12  0.03         0.06   0.36
## 257    0.15  0.03         0.06   0.36
## 258    0.05  0.18         0.03   0.36
## 259    0.11  0.00         0.06   0.36
## 260    0.08  0.07         0.05   0.35
## 261    0.13  0.09         0.04   0.35
## 262    0.05  0.13         0.04   0.35
## 263    0.07  0.09         0.04   0.34
## 264    0.13  0.04         0.05   0.34
## 265    0.02  0.06         0.05   0.34
## 266    0.18  0.00         0.05   0.33
## 267    0.08  0.08         0.04   0.33
## 268    0.17  0.02         0.05   0.33
## 269    0.14  0.00         0.05   0.32
## 270    0.22  0.05         0.04   0.31
## 271    0.13  0.00         0.05   0.31
## 272    0.15  0.01         0.05   0.31
## 273    0.14  0.00         0.05   0.31
## 274    0.10  0.00         0.05   0.31
## 275    0.12  0.06         0.04   0.31
## 276    0.07  0.04         0.05   0.30
## 277    0.21  0.05         0.04   0.30
## 278    0.15  0.00         0.05   0.30
## 279    0.09  0.03         0.05   0.30
## 280    0.03  0.13         0.03   0.29
```

```
## 281    0.03  0.02        0.05   0.29
## 282    0.16  0.00        0.05   0.29
## 283    0.18  0.01        0.04   0.29
## 284    0.08  0.03        0.04   0.29
## 285    0.14  0.00        0.05   0.29
## 286    0.12  0.00        0.05   0.28
## 287    0.24  0.00        0.04   0.28
## 288    0.12  0.00        0.05   0.28
## 289    0.03  0.05        0.04   0.28
## 290    0.12  0.05        0.04   0.28
## 291    0.00  0.18        0.02   0.28
## 292    0.05  0.00        0.05   0.27
## 293    0.09  0.02        0.04   0.27
## 294    0.03  0.00        0.05   0.27
## 295    0.09  0.00        0.05   0.27
## 296    0.09  0.01        0.04   0.27
## 297    0.00  0.12        0.03   0.27
## 298    0.00  0.02        0.04   0.26
## 299    0.05  0.07        0.03   0.25
## 300    0.07  0.06        0.03   0.25
## 301    0.07  0.00        0.04   0.25
## 302    0.04  0.00        0.04   0.25
## 303    0.00  0.00        0.05   0.24
## 304    0.13  0.00        0.04   0.24
## 305    0.04  0.08        0.03   0.24
## 306    0.13  0.03        0.03   0.24
## 307    0.12  0.00        0.04   0.24
## 308    0.16  0.00        0.04   0.24
## 309    0.09  0.00        0.04   0.24
## 310    0.10  0.00        0.04   0.24
## 311    0.00  0.24        0.00   0.24
## 312    0.09  0.00        0.04   0.24
## 313    0.05  0.02        0.04   0.24
## 314    0.00  0.00        0.04   0.24
## 315    0.08  0.00        0.04   0.23
## 316    0.09  0.00        0.04   0.23
## 317    0.16  0.00        0.04   0.23
## 318    0.06  0.02        0.04   0.23
## 319    0.11  0.01        0.04   0.23
## 320    0.08  0.03        0.03   0.23
## 321    0.06  0.05        0.03   0.23
## 322    0.15  0.00        0.03   0.23
## 323    0.06  0.02        0.04   0.22
## 324    0.04  0.06        0.03   0.22
## 325    0.07  0.00        0.04   0.22
## 326    0.16  0.00        0.03   0.22
## 327    0.04  0.03        0.03   0.22
## 328    0.13  0.00        0.03   0.22
## 329    0.09  0.00        0.04   0.22
## 330    0.06  0.00        0.04   0.21
## 331    0.02  0.08        0.02   0.21
## 332    0.04  0.08        0.02   0.21
## 333    0.09  0.00        0.04   0.21
## 334    0.05  0.00        0.04   0.21
## 335    0.08  0.00        0.03   0.21
## 336    0.07  0.04        0.03   0.21
```

```
## 337    0.07  0.03        0.03  0.21
## 338    0.03  0.03        0.03  0.20
## 339    0.08  0.00        0.03  0.20
## 340    0.08  0.00        0.03  0.20
## 341    0.11  0.00        0.03  0.20
## 342    0.10  0.00        0.03  0.19
## 343    0.16  0.00        0.03  0.19
## 344    0.07  0.03        0.03  0.19
## 345    0.07  0.00        0.03  0.19
## 346    0.08  0.01        0.03  0.19
## 347    0.13  0.04        0.02  0.18
## 348    0.06  0.04        0.02  0.18
## 349    0.00  0.09        0.02  0.18
## 350    0.05  0.00        0.03  0.18
## 351    0.04  0.00        0.03  0.17
## 352    0.00  0.05        0.02  0.17
## 353    0.09  0.06        0.02  0.17
## 354    0.06  0.04        0.02  0.17
## 355    0.00  0.04        0.02  0.17
## 356    0.00  0.00        0.03  0.17
## 357    0.00  0.05        0.02  0.17
## 358    0.08  0.00        0.03  0.17
## 359    0.06  0.01        0.03  0.16
## 360    0.05  0.00        0.03  0.16
## 361    0.07  0.00        0.03  0.16
## 362    0.05  0.04        0.02  0.16
## 363    0.04  0.00        0.03  0.16
## 364    0.04  0.03        0.02  0.16
## 365    0.02  0.05        0.02  0.16
## 366    0.04  0.02        0.02  0.16
## 367    0.02  0.00        0.03  0.16
## 368    0.03  0.07        0.02  0.16
## 369    0.06  0.05        0.02  0.16
## 370    0.02  0.00        0.03  0.15
## 371    0.09  0.00        0.02  0.15
## 372    0.05  0.04        0.02  0.15
## 373    0.00  0.03        0.02  0.15
## 374    0.03  0.07        0.01  0.15
## 375    0.00  0.00        0.03  0.15
## 376    0.00  0.15        0.00  0.15
## 377    0.00  0.10        0.01  0.15
## 378    0.00  0.00        0.03  0.15
## 379    0.00  0.15        0.00  0.15
## 380    0.00  0.06        0.02  0.14
## 381    0.00  0.07        0.01  0.14
## 382    0.00  0.04        0.02  0.14
## 383    0.04  0.06        0.01  0.14
## 384    0.12  0.00        0.02  0.14
## 385    0.04  0.00        0.02  0.14
## 386    0.05  0.00        0.02  0.14
## 387    0.00  0.07        0.01  0.14
## 388    0.04  0.00        0.02  0.14
## 389    0.00  0.00        0.03  0.14
## 390    0.12  0.00        0.02  0.14
## 391    0.06  0.00        0.02  0.14
## 392    0.07  0.00        0.02  0.14
```

```
## 393    0.00  0.06         0.01   0.14
## 394    0.02  0.07         0.01   0.13
## 395    0.02  0.00         0.02   0.13
## 396    0.00  0.04         0.02   0.13
## 397    0.00  0.00         0.02   0.13
## 398    0.06  0.00         0.02   0.13
## 399    0.05  0.00         0.02   0.13
## 400    0.06  0.00         0.02   0.13
## 401    0.00  0.02         0.02   0.13
## 402    0.06  0.00         0.02   0.13
## 403    0.00  0.07         0.01   0.13
## 404    0.00  0.13         0.00   0.13
## 405    0.00  0.07         0.01   0.13
## 406    0.05  0.00         0.02   0.13
## 407    0.09  0.00         0.02   0.13
## 408    0.11  0.00         0.02   0.12
## 409    0.03  0.00         0.02   0.12
## 410    0.00  0.00         0.02   0.12
## 411    0.05  0.03         0.01   0.12
## 412    0.01  0.07         0.01   0.12
## 413    0.00  0.02         0.02   0.12
## 414    0.01  0.11         0.00   0.12
## 415    0.00  0.00         0.02   0.12
## 416    0.04  0.00         0.02   0.12
## 417    0.10  0.00         0.02   0.11
## 418    0.00  0.00         0.02   0.11
## 419    0.00  0.00         0.02   0.11
## 420    0.02  0.00         0.02   0.11
## 421    0.00  0.00         0.02   0.11
## 422    0.00  0.00         0.02   0.11
## 423    0.01  0.00         0.02   0.11
## 424    0.00  0.11         0.00   0.11
## 425    0.01  0.06         0.01   0.11
## 426    0.00  0.11         0.00   0.11
## 427    0.07  0.00         0.02   0.11
## 428    0.00  0.11         0.00   0.11
## 429    0.00  0.11         0.00   0.11
## 430    0.00  0.11         0.00   0.11
## 431    0.09  0.00         0.02   0.11
## 432    0.05  0.02         0.01   0.11
## 433    0.00  0.00         0.02   0.11
## 434    0.00  0.00         0.02   0.10
## 435    0.00  0.05         0.01   0.10
## 436    0.04  0.00         0.02   0.10
## 437    0.00  0.06         0.01   0.10
## 438    0.00  0.06         0.01   0.10
## 439    0.00  0.02         0.01   0.10
## 440    0.00  0.02         0.02   0.10
## 441    0.00  0.09         0.00   0.10
## 442    0.03  0.00         0.02   0.10
## 443    0.02  0.02         0.01   0.10
## 444    0.03  0.01         0.02   0.10
## 445    0.03  0.06         0.01   0.10
## 446    0.00  0.00         0.02   0.10
## 447    0.01  0.03         0.01   0.10
## 448    0.08  0.00         0.01   0.10
```

```
## 449    0.00  0.00        0.02   0.10
## 450    0.00  0.01        0.02   0.10
## 451    0.00  0.04        0.01   0.09
## 452    0.04  0.00        0.02   0.09
## 453    0.04  0.00        0.02   0.09
## 454    0.00  0.09        0.00   0.09
## 455    0.00  0.06        0.01   0.09
## 456    0.05  0.03        0.01   0.09
## 457    0.08  0.00        0.01   0.09
## 458    0.00  0.00        0.02   0.09
## 459    0.00  0.09        0.00   0.09
## 460    0.00  0.00        0.02   0.09
## 461    0.00  0.05        0.01   0.09
## 462    0.00  0.04        0.01   0.09
## 463    0.00  0.00        0.02   0.09
## 464    0.00  0.00        0.02   0.09
## 465    0.00  0.09        0.00   0.09
## 466    0.07  0.00        0.01   0.09
## 467    0.00  0.09        0.00   0.09
## 468    0.00  0.00        0.02   0.08
## 469    0.02  0.00        0.02   0.08
## 470    0.00  0.01        0.01   0.08
## 471    0.02  0.00        0.01   0.08
## 472    0.02  0.00        0.01   0.08
## 473    0.03  0.00        0.01   0.08
## 474    0.00  0.00        0.02   0.08
## 475    0.02  0.00        0.01   0.08
## 476    0.00  0.00        0.02   0.08
## 477    0.00  0.05        0.01   0.08
## 478    0.00  0.02        0.01   0.08
## 479    0.06  0.01        0.01   0.08
## 480    0.00  0.01        0.01   0.08
## 481    0.02  0.01        0.01   0.08
## 482    0.01  0.02        0.01   0.07
## 483    0.00  0.01        0.01   0.07
## 484    0.00  0.03        0.01   0.07
## 485    0.00  0.05        0.01   0.07
## 486    0.00  0.07        0.00   0.07
## 487    0.00  0.00        0.01   0.07
## 488    0.00  0.07        0.00   0.07
## 489    0.00  0.00        0.01   0.07
## 490    0.00  0.02        0.01   0.07
## 491    0.06  0.00        0.01   0.07
## 492    0.00  0.00        0.01   0.07
## 493    0.00  0.00        0.01   0.07
## 494    0.00  0.01        0.01   0.07
## 495    0.00  0.00        0.01   0.07
## 496    0.00  0.00        0.01   0.07
## 497    0.00  0.07        0.00   0.07
## 498    0.06  0.00        0.01   0.07
## 499    0.00  0.07        0.00   0.07
## 500    0.00  0.02        0.01   0.07
## 501    0.06  0.00        0.01   0.07
## 502    0.05  0.01        0.01   0.07
## 503    0.03  0.00        0.01   0.07
## 504    0.00  0.00        0.01   0.07
```

```
## 505    0.00  0.00        0.01   0.07
## 506    0.06  0.00        0.01   0.07
## 507    0.00  0.07        0.00   0.07
## 508    0.04  0.01        0.01   0.07
## 509    0.06  0.00        0.01   0.07
## 510    0.00  0.00        0.01   0.06
## 511    0.00  0.06        0.00   0.06
## 512    0.00  0.00        0.01   0.06
## 513    0.00  0.00        0.01   0.06
## 514    0.00  0.00        0.01   0.06
## 515    0.00  0.00        0.01   0.06
## 516    0.00  0.03        0.01   0.06
## 517    0.05  0.00        0.01   0.06
## 518    0.00  0.00        0.01   0.06
## 519    0.00  0.06        0.00   0.06
## 520    0.00  0.00        0.01   0.06
## 521    0.00  0.06        0.00   0.06
## 522    0.00  0.06        0.00   0.06
## 523    0.00  0.04        0.00   0.06
## 524    0.00  0.00        0.01   0.06
## 525    0.00  0.00        0.01   0.06
## 526    0.00  0.00        0.01   0.06
## 527    0.00  0.00        0.01   0.06
## 528    0.05  0.00        0.01   0.06
## 529    0.00  0.00        0.01   0.06
## 530    0.05  0.00        0.01   0.06
## 531    0.00  0.03        0.00   0.06
## 532    0.00  0.00        0.01   0.06
## 533    0.01  0.00        0.01   0.06
## 534    0.01  0.00        0.01   0.06
## 535    0.02  0.00        0.01   0.06
## 536    0.05  0.00        0.01   0.06
## 537    0.00  0.00        0.01   0.05
## 538    0.00  0.00        0.01   0.05
## 539    0.00  0.00        0.01   0.05
## 540    0.00  0.00        0.01   0.05
## 541    0.01  0.00        0.01   0.05
## 542    0.00  0.00        0.01   0.05
## 543    0.01  0.03        0.00   0.05
## 544    0.00  0.00        0.01   0.05
## 545    0.01  0.04        0.00   0.05
## 546    0.00  0.05        0.00   0.05
## 547    0.04  0.00        0.01   0.05
## 548    0.00  0.00        0.01   0.05
## 549    0.00  0.00        0.01   0.05
## 550    0.00  0.00        0.01   0.05
## 551    0.02  0.00        0.01   0.05
## 552    0.00  0.00        0.01   0.05
## 553    0.00  0.05        0.00   0.05
## 554    0.00  0.05        0.00   0.05
## 555    0.04  0.00        0.01   0.05
## 556    0.00  0.00        0.01   0.05
## 557    0.00  0.00        0.01   0.05
## 558    0.02  0.00        0.01   0.05
## 559    0.00  0.00        0.01   0.05
## 560    0.00  0.00        0.01   0.05
```

```
## 561     0.00    0.00           0.01    0.05
## 562     0.00    0.00           0.01    0.05
## 563     0.00    0.00           0.01    0.04
## 564     0.00    0.00           0.01    0.04
## 565     0.00    0.00           0.01    0.04
## 566     0.00    0.00           0.01    0.04
## 567     0.00    0.04           0.00    0.04
## 568     0.00    0.01           0.01    0.04
## 569     0.04    0.00           0.01    0.04
## 570     0.01    0.00           0.01    0.04
## 571     0.00    0.00           0.01    0.04
## 572     0.04    0.00           0.01    0.04
## 573     0.00    0.03           0.00    0.04
## 574     0.00    0.00           0.01    0.04
## 575     0.01    0.00           0.01    0.04
## 576     0.00    0.00           0.01    0.04
## 577     0.02    0.00           0.01    0.04
## 578     0.00    0.00           0.01    0.04
## 579     0.00    0.00           0.01    0.04
## 580     0.03    0.00           0.01    0.04
## 581     0.00    0.03           0.00    0.04
## 582     0.00    0.00           0.01    0.04
## 583     0.00    0.00           0.01    0.04
## 584     0.03    0.00           0.01    0.04
## 585     0.00    0.04           0.00    0.04
## 586     0.00    0.00           0.01    0.04
## 587     0.03    0.00           0.01    0.04
## 588     0.00    0.01           0.01    0.04
## 589     0.01    0.00           0.01    0.04
## 590     0.00    0.00           0.01    0.04
## 591     0.00    0.00           0.01    0.04
## 592     0.00    0.00           0.01    0.04
## 593     0.00    0.00           0.01    0.04
## 594     0.01    0.00           0.01    0.04
## 595     0.00    0.01           0.01    0.04
## 596     0.00    0.00           0.01    0.04
## 597     0.00    0.00           0.01    0.04
## 598     0.00    0.00           0.01    0.04
## 599     0.00    0.04           0.00    0.04
## 600     0.00    0.00           0.01    0.04
## 601     0.00    0.04           0.00    0.04
## 602     0.03    0.00           0.00    0.03
## 603     0.00    0.00           0.01    0.03
## 604     0.03    0.00           0.00    0.03
## 605     0.00    0.00           0.01    0.03
## 606     0.00    0.03           0.00    0.03
## 607     0.00    0.03           0.00    0.03
## 608     0.00    0.03           0.00    0.03
## 609     0.00    0.01           0.00    0.03
## 610     0.00    0.00           0.01    0.03
## 611     0.00    0.03           0.00    0.03
## 612     0.00    0.00           0.01    0.03
## 613     0.00    0.00           0.01    0.03
## 614     0.00    0.01           0.00    0.03
## 615     0.00    0.03           0.00    0.03
## 616     0.00    0.03           0.00    0.03
```

```
## 617    0.00  0.00         0.01   0.03
## 618    0.00  0.03         0.00   0.03
## 619    0.02  0.00         0.00   0.03
## 620    0.00  0.03         0.00   0.03
## 621    0.00  0.00         0.01   0.03
## 622    0.00  0.00         0.01   0.03
## 623    0.00  0.00         0.01   0.03
## 624    0.00  0.03         0.00   0.03
## 625    0.00  0.00         0.01   0.03
## 626    0.00  0.00         0.01   0.03
## 627    0.00  0.03         0.00   0.03
## 628    0.00  0.00         0.01   0.03
## 629    0.00  0.00         0.01   0.03
## 630    0.00  0.03         0.00   0.03
## 631    0.02  0.00         0.00   0.03
## 632    0.00  0.03         0.00   0.03
## 633    0.00  0.00         0.00   0.03
## 634    0.00  0.00         0.00   0.03
## 635    0.00  0.03         0.00   0.03
## 636    0.00  0.00         0.00   0.03
## 637    0.00  0.00         0.00   0.03
## 638    0.00  0.02         0.00   0.03
## 639    0.00  0.00         0.00   0.03
## 640    0.00  0.02         0.00   0.02
## 641    0.02  0.00         0.00   0.02
## 642    0.00  0.02         0.00   0.02
## 643    0.00  0.02         0.00   0.02
## 644    0.00  0.00         0.00   0.02
## 645    0.01  0.01         0.00   0.02
## 646    0.02  0.00         0.00   0.02
## 647    0.00  0.00         0.00   0.02
## 648    0.00  0.02         0.00   0.02
## 649    0.00  0.02         0.00   0.02
## 650    0.00  0.02         0.00   0.02
## 651    0.00  0.00         0.00   0.02
## 652    0.00  0.00         0.00   0.02
## 653    0.00  0.00         0.00   0.02
## 654    0.00  0.00         0.00   0.02
## 655    0.00  0.02         0.00   0.02
## 656    0.00  0.00         0.00   0.02
## 657    0.00  0.00         0.00   0.02
## 658    0.00  0.00         0.00   0.02
## 659    0.00  0.00         0.00   0.02
## 660    0.00  0.02         0.00   0.02
## 661    0.00  0.02         0.00   0.02
## 662    0.02  0.00         0.00   0.02
## 663    0.00  0.02         0.00   0.02
## 664    0.00  0.00         0.00   0.02
## 665    0.00  0.00         0.00   0.02
## 666    0.00  0.02         0.00   0.02
## 667    0.00  0.02         0.00   0.02
## 668    0.00  0.02         0.00   0.02
## 669    0.00  0.02         0.00   0.02
## 670    0.00  0.00         0.00   0.02
## 671    0.01  0.00         0.00   0.02
## 672    0.00  0.00         0.00   0.02
```

```
## 673    0.00  0.02        0.00    0.02
## 674    0.00  0.02        0.00    0.02
## 675    0.00  0.00        0.00    0.02
## 676    0.01  0.00        0.00    0.02
## 677    0.00  0.00        0.00    0.02
## 678    0.01  0.01        0.00    0.02
## 679    0.00  0.00        0.00    0.01
## 680    0.01  0.01        0.00    0.01
## 681    0.00  0.01        0.00    0.01
## 682    0.01  0.00        0.00    0.01
## 683    0.00  0.01        0.00    0.01
## 684    0.00  0.01        0.00    0.01
## 685    0.00  0.01        0.00    0.01
## 686    0.00  0.00        0.00    0.01
## 687    0.00  0.01        0.00    0.01
## 688    0.00  0.01        0.00    0.01
## 689    0.00  0.01        0.00    0.01
## 690    0.00  0.01        0.00    0.01
## 691    0.00  0.01        0.00    0.01
## 692    0.01  0.00        0.00    0.01
## 693    0.00  0.01        0.00    0.01
## 694    0.01  0.00        0.00    0.01
## 695    0.00  0.00        0.00    0.01
## 696    0.01  0.00        0.00    0.01
## 697    0.00  0.01        0.00    0.01
## 698    0.00  0.00        0.00    0.01
## 699    0.00  0.01        0.00    0.01
## 700    0.00  0.00        0.00    0.01
## 701    0.00  0.01        0.00    0.01
## 702    0.01  0.00        0.00    0.01
## 703    0.00  0.01        0.00    0.01
## 704    0.00  0.01        0.00    0.01
## 705    0.00  0.00        0.00    0.01
## 706    0.00  0.01        0.00    0.01
## 707    0.00  0.01        0.00    0.01
## 708    0.00  0.01        0.00    0.01
## 709    0.01  0.00        0.00    0.01
## 710    0.00  0.01        0.00    0.01
## 711    0.00  0.00        0.00    0.01
## 712    0.00  0.00        0.00    0.01
## 713    0.00  0.00        0.00    0.00
## 714    0.00  0.00        0.00    0.00
## 715    0.00  0.00        0.00    0.00
## 716    0.00  0.00        0.00    0.00
## 717    0.00  0.00        0.00    0.00
## 718    0.00  0.00        0.00    0.00
## 719    0.00  0.00        0.00    0.00
## 720    0.00  0.00        0.00    0.00
## 721    0.00  0.00        0.00    0.00
## 722    0.00  0.00        0.00    0.00
## 723    0.00  0.00        0.00    0.00
## 724    0.00  0.00        0.00    0.00
## 725    0.00  0.00        0.00    0.00
## 726    0.00  0.00        0.00    0.00
## 727    0.00  0.00        0.00    0.00
## 728    0.00  0.00        0.00    0.00
```

```
## 729      0.00  0.00          0.00  0.00
## 730      0.00  0.00          0.00  0.00
## 731      0.00  0.00          0.00  0.00
## 732      0.00  0.00          0.00  0.00
## 733      0.00  0.00          0.00  0.00
## 734      0.00  0.00          0.00  0.00
## 735      0.00  0.00          0.00  0.00
## 736      0.00  0.00          0.00  0.00
## 737      0.00  0.00          0.00  0.00
## 738      0.00  0.00          0.00  0.00
## 739      0.00  0.00          0.00  0.00
## 740      0.00  0.00          0.00  0.00
## 741      0.00  0.00          0.00  0.00
## 742      0.00  0.00          0.00  0.00
## 743      0.00  0.00          0.00  0.00
## 744      0.00  0.00          0.00  0.00
## 745      0.00  0.00          0.00  0.00
## 746      0.00  0.00          0.00  0.00
## 747      0.00  0.00          0.00  0.00
## 748      0.00  0.00          0.00  0.00
## 749      0.00  0.00          0.00  0.00
## 750      0.00  0.00          0.00  0.00
## 751      0.00  0.00          0.00  0.00
## 752      0.00  0.00          0.00  0.00
## 753      0.00  0.00          0.00  0.00
## 754      0.00  0.00          0.00  0.00
## 755      0.00  0.00          0.00  0.00
## 756      0.00  0.00          0.00  0.00
## 757      0.00  0.00          0.00  0.00
## 758      0.00  0.00          0.00  0.00
## 759      0.00  0.00          0.00  0.00
## 760      0.00  0.00          0.00  0.00
## 761      0.00  0.00          0.00  0.00
## 762      0.00  0.00          0.00  0.00
## 763      0.00  0.00          0.00  0.00
## 764      0.00  0.00          0.00  0.00
## 765      0.00  0.00          0.00  0.00
## 766      0.00  0.00          0.00  0.00
## 767      0.00  0.00          0.00  0.00
## 768      0.00  0.00          0.00  0.00
## 769      0.00  0.00          0.00  0.00
## 770      0.00  0.00          0.00  0.00
## 771      0.00  0.00          0.00  0.00
## 772      0.00  0.00          0.00  0.00
## 773      0.00  0.00          0.00  0.00
## 774      0.00  0.00          0.00  0.00
## 775      0.00  0.00          0.00  0.00
## 776      0.00  0.00          0.00  0.00
## 777      0.00  0.00          0.00  0.00
## 778      0.00  0.00          0.00  0.00
## 779      0.00  0.00          0.00  0.00
## 780      0.00  0.00          0.00  0.00
## 781      0.00  0.00          0.00  0.00
## 782      0.00  0.00          0.00  0.00
## 783      0.00  0.00          0.00  0.00
## 784      0.00  0.00          0.00  0.00
```

```
## 785      0.00  0.00        0.00   0.00
## 786      0.00  0.00        0.00   0.00
## 787      0.00  0.00        0.00   0.00
## 788      0.00  0.00        0.00   0.00
## 789      0.00  0.00        0.00   0.00
## 790      0.00  0.00        0.00   0.00
## 791      0.00  0.00        0.00   0.00
## 792      0.00  0.00        0.00   0.00
## 793      0.00  0.00        0.00   0.00
## 794      0.00  0.00        0.00   0.00
## 795      0.00  0.00        0.00   0.00
## 796      0.00  0.00        0.00   0.00
## 797      0.00  0.00        0.00   0.00
## 798      0.00  0.00        0.00   0.00
## 799      0.00  0.00        0.00   0.00
## 800      0.00  0.00        0.00   0.00
## 801      0.00  0.00        0.00   0.00
## 802      0.00  0.00        0.00   0.00
## 803      0.00  0.00        0.00   0.00
## 804      0.00  0.00        0.00   0.00
## 805      0.00  0.00        0.00   0.00
## 806      0.00  0.00        0.00   0.00
## 807      0.00  0.00        0.00   0.00
## 808      0.00  0.00        0.00   0.00
## 809      0.00  0.00        0.00   0.00
## 810      0.00  0.00        0.00   0.00
## 811      0.00  0.00        0.00   0.00
## 812      0.00  0.00        0.00   0.00
## 813      0.00  0.00        0.00   0.00
## 814      0.00  0.00        0.00   0.00
## 815      0.00  0.00        0.00   0.00
## 816      0.00  0.00        0.00   0.00
## 817      0.00  0.00        0.00   0.00
## 818      0.00  0.00        0.00   0.00
## 819      0.00  0.00        0.00   0.00
## 820      0.00  0.00        0.00   0.00
## 821      0.00  0.00        0.00   0.00
## 822      0.00  0.00        0.00   0.00
## 823      0.00  0.00        0.00   0.00
## 824      0.00  0.00        0.00   0.00
## 825      0.00  0.00        0.00   0.00
## 826      0.00  0.00        0.00   0.00
## 827      0.00  0.00        0.00   0.00
## 828      0.00  0.00        0.00   0.00
## 829      0.00  0.00        0.00   0.00
## 830      0.00  0.00        0.00   0.00
## 831      0.00  0.00        0.00   0.00
## 832      0.00  0.00        0.00   0.00
## 833      0.00  0.00        0.00   0.00
## 834      0.00  0.00        0.00   0.00
## 835      0.00  0.00        0.00   0.00
## 836      0.00  0.00        0.00   0.00
## 837      0.00  0.00        0.00   0.00
## 838      0.00  0.00        0.00   0.00
## 839      0.00  0.00        0.00   0.00
## 840      0.00  0.00        0.00   0.00
```

```
## 841     0.00   0.00        0.00   0.00
## 842     0.00   0.00        0.00   0.00
## 843     0.00   0.00        0.00   0.00
## 844     0.00   0.00        0.00   0.00
## 845     0.00   0.00        0.00   0.00
## 846     0.00   0.00        0.00   0.00
## 847     0.00   0.00        0.00   0.00
## 848     0.00   0.00        0.00   0.00
## 849     0.00   0.00        0.00   0.00
## 850     0.00   0.00        0.00   0.00
## 851     0.00   0.00        0.00   0.00
## 852     0.00   0.00        0.00   0.00
## 853     0.00   0.00        0.00   0.00
## 854     0.00   0.00        0.00   0.00
## 855     0.00   0.00        0.00   0.00
## 856     0.00   0.00        0.00   0.00
## 857     0.00   0.00        0.00   0.00
## 858     0.00   0.00        0.00   0.00
## 859     0.00   0.00        0.00   0.00
## 860     0.00   0.00        0.00   0.00
## 861     0.00   0.00        0.00   0.00
## 862     0.00   0.00        0.00   0.00
## 863     0.00   0.00        0.00   0.00
## 864     0.00   0.00        0.00   0.00
## 865     0.00   0.00        0.00   0.00
## 866     0.00   0.00        0.00   0.00
## 867     0.00   0.00        0.00   0.00
## 868     0.00   0.00        0.00   0.00
## 869     0.00   0.00        0.00   0.00
## 870     0.00   0.00        0.00   0.00
## 871     0.00   0.00        0.00   0.00
## 872     0.00   0.00        0.00   0.00
## 873     0.00   0.00        0.00   0.00
## 874     0.00   0.00        0.00   0.00
## 875     0.00   0.00        0.00   0.00
## 876     0.00   0.00        0.00   0.00
## 877     0.00   0.00        0.00   0.00
## 878     0.00   0.00        0.00   0.00
## 879     0.00   0.00        0.00   0.00
## 880     0.00   0.00        0.00   0.00
## 881     0.00   0.00        0.00   0.00
## 882     0.00   0.00        0.00   0.00
## 883     0.00   0.00        0.00   0.00
## 884     0.00   0.00        0.00   0.00
## 885     0.00   0.00        0.00   0.00
## 886     0.00   0.00        0.00   0.00
## 887     0.00   0.00        0.00   0.00
## 888     0.00   0.00        0.00   0.00
## 889     0.00   0.00        0.00   0.00
## 890     0.00   0.00        0.00   0.00
## 891     0.00   0.00        0.00   0.00
## 892     0.00   0.00        0.00   0.00
## 893     0.00   0.00        0.00   0.00
## 894     0.00   0.00        0.00   0.00
## 895     0.00   0.00        0.00   0.00
## 896     0.00   0.00        0.00   0.00
```

```
## 897        0.00    0.00            0.00    0.00
## 898        0.00    0.00            0.00    0.00
## 899        0.00    0.00            0.00    0.00
## 900        0.00    0.00            0.00    0.00
## 901        0.00    0.00            0.00    0.00
## 902        0.00    0.00            0.00    0.00
## 903        0.00    0.00            0.00    0.00
## 904        0.00    0.00            0.00    0.00
## 905        0.00    0.00            0.00    0.00
## 906        0.00    0.00            0.00    0.00
## 907        0.00    0.00            0.00    0.00
## 908        0.00    0.00            0.00    0.00
## 909        0.00    0.00            0.00    0.00
## 910        0.00    0.00            0.00    0.00
## 911        0.00    0.00            0.00    0.00
## 912        0.00    0.00            0.00    0.00
## 913        0.00    0.00            0.00    0.00
## 914        0.00    0.00            0.00    0.00
## 915        0.00    0.00            0.00    0.00
## 916        0.00    0.00            0.00    0.00
## 917        0.00    0.00            0.00    0.00
## 918        0.00    0.00            0.00    0.00
## 919        0.00    0.00            0.00    0.00
## 920        0.00    0.00            0.00    0.00
## 921        0.00    0.00            0.00    0.00
## 922        0.00    0.00            0.00    0.00
## 923        0.00    0.00            0.00    0.00
## 924        0.00    0.00            0.00    0.00
## 925        0.00    0.00            0.00    0.00
## 926        0.00    0.00            0.00    0.00
## 927        0.00    0.00            0.00    0.00
## 928        0.00    0.00            0.00    0.00
## 929        0.00    0.00            0.00    0.00
## 930        0.00    0.00            0.00    0.00
## 931        0.00    0.00            0.00    0.00
## 932        0.00    0.00            0.00    0.00
## 933        0.00    0.00            0.00    0.00
## 934        0.00    0.00            0.00    0.00
## 935        0.00    0.00            0.00    0.00
## 936        0.00    0.00            0.00    0.00
## 937        0.00    0.00            0.00    0.00
## 938        0.00    0.00            0.00    0.00
## 939        0.00    0.00            0.00    0.00
## 940        0.00    0.00            0.00    0.00
## 941        0.00    0.00            0.00    0.00
## 942        0.00    0.00            0.00    0.00
## 943        0.00    0.00            0.00    0.00
## 944        0.00    0.00            0.00    0.00
## 945        0.00    0.00            0.00    0.00
## 946        0.00    0.00            0.00    0.00
## 947        0.00    0.00            0.00    0.00
## 948        0.00    0.00            0.00    0.00
## 949        0.00    0.00            0.00    0.00
## 950        0.00    0.00            0.00    0.00
## 951        0.00    0.00            0.00    0.00
## 952        0.00    0.00            0.00    0.00
```

```
## 953      0.00   0.00          0.00   0.00
## 954      0.00   0.00          0.00   0.00
## 955      0.00   0.00          0.00   0.00
## 956      0.00   0.00          0.00   0.00
## 957      0.00   0.00          0.00   0.00
## 958      0.00   0.00          0.00   0.00
## 959      0.00   0.00          0.00   0.00
## 960      0.00   0.00          0.00   0.00
## 961      0.00   0.00          0.00   0.00
## 962      0.00   0.00          0.00   0.00
## 963      0.00   0.00          0.00   0.00
## 964      0.00   0.00          0.00   0.00
## 965      0.00   0.00          0.00   0.00
## 966      0.00   0.00          0.00   0.00
## 967      0.00   0.00          0.00   0.00
## 968      0.00   0.00          0.00   0.00
## 969      0.00   0.00          0.00   0.00
## 970      0.00   0.00          0.00   0.00
## 971      0.00   0.00          0.00   0.00
## 972      0.00   0.00          0.00   0.00
## 973      0.00   0.00          0.00   0.00
## 974      0.00   0.00          0.00   0.00
## 975      0.00   0.00          0.00   0.00
## 976      0.00   0.00          0.00   0.00
## 977      0.00   0.00          0.00   0.00
## 978      0.00   0.00          0.00   0.00
## 979      0.00   0.00          0.00   0.00
## 980      0.00   0.00          0.00   0.00
## 981      0.00   0.00          0.00   0.00
## 982      0.00   0.00          0.00   0.00
## 983      0.00   0.00          0.00   0.00
## 984      0.00   0.00          0.00   0.00
## 985      0.00   0.00          0.00   0.00
## 986      0.00   0.00          0.00   0.00
## 987      0.00   0.00          0.00   0.00
## 988      0.00   0.00          0.00   0.00
## 989      0.00   0.00          0.00   0.00
## 990      0.00   0.00          0.00   0.00
## 991      0.00   0.00          0.00   0.00
## 992      0.00   0.00          0.00   0.00
## 993      0.00   0.00          0.00   0.00
## 994      0.00   0.00          0.00   0.00
## 995      0.00   0.00          0.00   0.00
## 996      0.00   0.00          0.00   0.00
## 997      0.00   0.00          0.00   0.00
## 998      0.00   0.00          0.00   0.00
## 999      0.00   0.00          0.00   0.00
## 1000     0.00   0.00          0.00   0.00
## 1001     0.00   0.00          0.00   0.00
## 1002     0.00   0.00          0.00   0.00
## 1003     0.00   0.00          0.00   0.00
## 1004     0.00   0.00          0.00   0.00
## 1005     0.00   0.00          0.00   0.00
## 1006     0.00   0.00          0.00   0.00
## 1007     0.00   0.00          0.00   0.00
## 1008     0.00   0.00          0.00   0.00
```

```
## 1009   0.00   0.00          0.00   0.00
## 1010   0.00   0.00          0.00   0.00
## 1011   0.00   0.00          0.00   0.00
## 1012   0.00   0.00          0.00   0.00
## 1013   0.00   0.00          0.00   0.00
## 1014   0.00   0.00          0.00   0.00
## 1015   0.00   0.00          0.00   0.00
## 1016   0.00   0.00          0.00   0.00
## 1017   0.00   0.00          0.00   0.00
## 1018   0.00   0.00          0.00   0.00
## 1019   0.00   0.00          0.00   0.00
## 1020   0.00   0.00          0.00   0.00
## 1021   0.00   0.00          0.00   0.00
## 1022   0.00   0.00          0.00   0.00
## 1023   0.00   0.00          0.00   0.00
## 1024   0.00   0.00          0.00   0.00
## 1025   0.00   0.00          0.00   0.00
## 1026   0.00   0.00          0.00   0.00
## 1027   0.00   0.00          0.00   0.00
## 1028   0.00   0.00          0.00   0.00
## 1029   0.00   0.00          0.00   0.00
## 1030   0.00   0.00          0.00   0.00
## 1031   0.00   0.00          0.00   0.00
## 1032   0.00   0.00          0.00   0.00
## 1033   0.00   0.00          0.00   0.00
## 1034   0.00   0.00          0.00   0.00
```

#part 2**-descriptive statistics for quantitative variables

```
summary(a)
```

```
##     Game             Year             Genre            Publisher
## Length:1034      Length:1034      Length:1034      Length:1034
## Class :character  Class :character  Class :character  Class :character
## Mode  :character  Mode  :character  Mode  :character  Mode  :character
##
##
##
## North.America       Europe           Japan          Rest.of.World
## Min.   :0.0000   Min.   :0.0000   Min.   :0.00000   Min.   :0.00000
## 1st Qu.:0.0000   1st Qu.:0.0000   1st Qu.:0.00000   1st Qu.:0.00000
## Median :0.0200   Median :0.0000   Median :0.00000   Median :0.01000
## Mean   :0.2046   Mean   :0.2487   Mean   :0.03364   Mean   :0.08901
## 3rd Qu.:0.1200   3rd Qu.:0.1300   3rd Qu.:0.03000   3rd Qu.:0.05000
## Max.   :6.1800   Max.   :9.7100   Max.   :2.17000   Max.   :3.02000
##    Global
## Min.   : 0.0000
## 1st Qu.: 0.0000
## Median : 0.0600
## Mean   : 0.5761
## 3rd Qu.: 0.3575
## Max.   :19.3900
```

```
mean(a$Global)
```

```
## [1] 0.5760542
```

Ī

```
median(a$Global)
```

```
## [1] 0.06
```

Ī

```
sum(a$Global)
```

```
## [1] 595.64
```

```
sd(a$Global)
```

```
## [1] 1.583534
```

```
var(a$Global)
```

```
## [1] 2.507579
```

```
max(a$Global)
```

```
## [1] 19.39
```

```
min(a$Global)
```

```
## [1] 0
```

```
str(a$Global)
```

```
##  num [1:1034] 19.4 15.1 13.9 13.4 11.8 ...
```

#part3 **-descriptive statistics for categorical variables

```
table(a$Genre)
```

```
##
##          Action Action-Adventure       Adventure         Fighting
##             258               40              97               35
##            Misc              MMO           Music            Party
##             123                8              19                2
##        Platform           Puzzle          Racing     Role-Playing
##              46               16              48              123
##         Shooter       Simulation          Sports         Strategy
##              89               23              71               28
##    Visual Novel
##               8
```

a$Genre

```
##   [1] "Action"            "Shooter"           "Action-Adventure"
##   [4] "Shooter"           "Sports"            "Sports"
##   [7] "Action"            "Action-Adventure"  "Shooter"
##  [10] "Role-Playing"      "Sports"            "Shooter"
##  [13] "Shooter"           "Shooter"           "Action-Adventure"
##  [16] "Misc"              "Sports"            "Action"
##  [19] "Action"            "Shooter"           "Action"
##  [22] "Role-Playing"      "Role-Playing"      "Platform"
##  [25] "Action"            "Shooter"           "Shooter"
##  [28] "Shooter"           "Shooter"           "Action-Adventure"
##  [31] "Shooter"           "Action"            "Shooter"
##  [34] "Action"            "Action"            "Shooter"
##  [37] "Sports"            "Action"            "Shooter"
##  [40] "Racing"            "Action"            "Sports"
##  [43] "Fighting"          "Sports"            "Role-Playing"
##  [46] "Action"            "Sports"            "Action"
##  [49] "Sports"            "Sports"            "Action"
##  [52] "Action-Adventure"  "Shooter"           "Role-Playing"
##  [55] "Action"            "Shooter"           "Action-Adventure"
##  [58] "Shooter"           "Action-Adventure"  "Role-Playing"
##  [61] "Action-Adventure"  "Racing"            "Sports"
##  [64] "Sports"            "Action"            "Role-Playing"
##  [67] "Platform"          "Racing"            "Action"
##  [70] "Role-Playing"      "Action-Adventure"  "Sports"
##  [73] "Racing"            "Shooter"           "Racing"
##  [76] "Misc"              "Shooter"           "Adventure"
##  [79] "Platform"          "MMO"               "Action"
##  [82] "Role-Playing"      "Sports"            "Action-Adventure"
##  [85] "Action"            "Action"            "Adventure"
##  [88] "Platform"          "Action"            "Racing"
##  [91] "Role-Playing"      "Action"            "Shooter"
##  [94] "Fighting"          "Role-Playing"      "Fighting"
##  [97] "Role-Playing"      "Shooter"           "Shooter"
## [100] "Adventure"         "Fighting"          "Sports"
## [103] "Action-Adventure"  "Action"            "Platform"
## [106] "Role-Playing"      "Fighting"          "Role-Playing"
## [109] "Simulation"        "Fighting"          "Shooter"
## [112] "Sports"            "Action-Adventure"  "Sports"
## [115] "Action-Adventure"  "Sports"            "Shooter"
## [118] "Racing"            "Sports"            "Music"
## [121] "Action-Adventure"  "Action"            "Action-Adventure"
## [124] "Role-Playing"      "Fighting"          "Action"
## [127] "Action"            "Sports"            "Sports"
## [130] "Misc"              "Role-Playing"      "Action"
## [133] "Fighting"          "Role-Playing"      "Adventure"
## [136] "Sports"            "Action"            "Shooter"
## [139] "Role-Playing"      "Action"            "Sports"
## [142] "Sports"            "Action"            "Shooter"
## [145] "Fighting"          "Sports"            "Sports"
## [148] "Sports"            "Action"            "Role-Playing"
## [151] "Role-Playing"      "Action"            "Action"
## [154] "Action"            "Adventure"         "Shooter"
## [157] "Action"            "Shooter"           "Action"
## [160] "Simulation"        "Racing"            "Sports"
## [163] "Action"            "Action"            "Action"
```

```
## [166] "MMO"              "Shooter"           "Racing"
## [169] "Action"           "Sports"            "Platform"
## [172] "Sports"           "Action-Adventure"  "Sports"
## [175] "Shooter"          "Sports"            "Racing"
## [178] "Role-Playing"     "Action-Adventure"  "Fighting"
## [181] "Role-Playing"     "Adventure"         "Racing"
## [184] "Shooter"          "Music"             "Sports"
## [187] "Shooter"          "Role-Playing"      "Adventure"
## [190] "Fighting"         "Action"            "Shooter"
## [193] "Action-Adventure" "Role-Playing"      "Racing"
## [196] "Sports"           "Party"             "Adventure"
## [199] "Adventure"        "Shooter"           "Role-Playing"
## [202] "Action"           "Action"            "Music"
## [205] "Sports"           "Sports"            "Action-Adventure"
## [208] "Shooter"          "Platform"          "Role-Playing"
## [211] "Role-Playing"     "Shooter"           "Sports"
## [214] "Racing"           "Platform"          "Sports"
## [217] "Action"           "Racing"            "Shooter"
## [220] "Action"           "Racing"            "Shooter"
## [223] "Shooter"          "Action"            "Action"
## [226] "Adventure"        "Shooter"           "Action"
## [229] "Action"           "Racing"            "Platform"
## [232] "Music"            "Fighting"          "Action-Adventure"
## [235] "Adventure"        "Role-Playing"      "Role-Playing"
## [238] "Action"           "Misc"              "Platform"
## [241] "Misc"             "Action"            "Action"
## [244] "Platform"         "Simulation"        "Music"
## [247] "Role-Playing"     "Music"             "Action"
## [250] "Platform"         "Simulation"        "Adventure"
## [253] "Action-Adventure" "Action"            "Role-Playing"
## [256] "Action"           "Shooter"           "Action"
## [259] "Role-Playing"     "Role-Playing"      "Fighting"
## [262] "Action-Adventure" "Role-Playing"      "Role-Playing"
## [265] "Fighting"         "Action"            "Role-Playing"
## [268] "Action-Adventure" "Shooter"           "Sports"
## [271] "Action"           "Platform"          "Fighting"
## [274] "Strategy"         "Misc"              "Simulation"
## [277] "Fighting"         "Music"             "Misc"
## [280] "Role-Playing"     "Action"            "Platform"
## [283] "Racing"           "Action"            "Adventure"
## [286] "Action"           "Action"            "Simulation"
## [289] "Action"           "Role-Playing"      "Action"
## [292] "Sports"           "Shooter"           "Shooter"
## [295] "Action-Adventure" "Racing"            "Action"
## [298] "Fighting"         "Adventure"         "Fighting"
## [301] "Action"           "Sports"            "Sports"
## [304] "Platform"         "Role-Playing"      "Racing"
## [307] "Misc"             "Action"            "Action"
## [310] "Action-Adventure" "Sports"            "MMO"
## [313] "Role-Playing"     "Shooter"           "Sports"
## [316] "Puzzle"           "Role-Playing"      "Action"
## [319] "Shooter"          "Action"            "Action"
## [322] "Music"            "Action"            "Action"
## [325] "Adventure"        "Racing"            "Action"
## [328] "Shooter"          "Action"            "Shooter"
## [331] "Action"           "Role-Playing"      "Action"
```

```
## [334] "Sports"            "Action"           "Misc"
## [337] "Role-Playing"      "Action"           "Adventure"
## [340] "Action"            "Racing"           "Simulation"
## [343] "Music"             "Action"           "Adventure"
## [346] "Action"            "Racing"           "Action"
## [349] "Action"            "Adventure"        "Adventure"
## [352] "Shooter"           "MMO"              "MMO"
## [355] "Fighting"          "Action"           "Fighting"
## [358] "Racing"            "Racing"           "Action-Adventure"
## [361] "Platform"          "Role-Playing"     "Action"
## [364] "Fighting"          "Action"           "Fighting"
## [367] "Role-Playing"      "Role-Playing"     "Action-Adventure"
## [370] "Visual Novel"      "Adventure"        "Action"
## [373] "Role-Playing"      "Role-Playing"     "Racing"
## [376] "Adventure"         "Action"           "Action"
## [379] "Role-Playing"      "Role-Playing"     "Role-Playing"
## [382] "Role-Playing"      "Action"           "Sports"
## [385] "Platform"          "Action"           "Fighting"
## [388] "Action-Adventure"  "Music"            "Racing"
## [391] "Racing"            "Racing"           "Role-Playing"
## [394] "Action"            "Sports"           "Music"
## [397] "Racing"            "Shooter"          "Racing"
## [400] "Sports"            "Action"           "Sports"
## [403] "Visual Novel"      "Role-Playing"     "Adventure"
## [406] "Action"            "Sports"           "Role-Playing"
## [409] "Action"            "Simulation"       "Role-Playing"
## [412] "Action"            "Adventure"        "Role-Playing"
## [415] "Misc"              "Adventure"        "Role-Playing"
## [418] "Strategy"          "Adventure"        "Action-Adventure"
## [421] "Platform"          "Adventure"        "Racing"
## [424] "Simulation"        "Role-Playing"     "Strategy"
## [427] "Adventure"         "Misc"             "Action"
## [430] "Shooter"           "Shooter"          "Action"
## [433] "Platform"          "Action"           "Role-Playing"
## [436] "Simulation"        "Action"           "Action"
## [439] "Action"            "MMO"              "Action"
## [442] "Puzzle"            "Role-Playing"     "Strategy"
## [445] "Action"            "Shooter"          "Fighting"
## [448] "Fighting"          "Music"            "Action-Adventure"
## [451] "Action"            "Role-Playing"     "Action"
## [454] "Music"             "Strategy"         "Strategy"
## [457] "Sports"            "Action"           "Action"
## [460] "Action"            "Role-Playing"     "Role-Playing"
## [463] "Shooter"           "Racing"           "Role-Playing"
## [466] "Action"            "Role-Playing"     "Action"
## [469] "Adventure"         "Platform"         "Shooter"
## [472] "Adventure"         "Action"           "Misc"
## [475] "Adventure"         "Simulation"       "Role-Playing"
## [478] "Action"            "Racing"           "Action"
## [481] "Racing"            "Role-Playing"     "Action"
## [484] "Role-Playing"      "Action"           "Role-Playing"
## [487] "Action"            "Misc"             "Action"
## [490] "Action"            "Adventure"        "Shooter"
## [493] "Adventure"         "Visual Novel"     "Shooter"
## [496] "Racing"            "Action"           "Simulation"
## [499] "Action-Adventure"  "Action"           "Adventure"
```

```
## [502] "Action"           "Action"            "Adventure"
## [505] "Misc"             "Action"            "Adventure"
## [508] "Action"           "Role-Playing"      "Sports"
## [511] "Sports"           "Misc"              "Sports"
## [514] "Misc"             "Adventure"         "Role-Playing"
## [517] "Sports"           "Racing"            "Role-Playing"
## [520] "Action"           "Strategy"          "Role-Playing"
## [523] "Action"           "Adventure"         "Misc"
## [526] "Adventure"        "Action"            "Sports"
## [529] "Action"           "Sports"            "Role-Playing"
## [532] "Adventure"        "Action"            "Strategy"
## [535] "Role-Playing"     "Racing"            "Adventure"
## [538] "Action"           "Role-Playing"      "Shooter"
## [541] "Action-Adventure" "Platform"          "Fighting"
## [544] "Strategy"         "Role-Playing"      "Role-Playing"
## [547] "Action"           "Misc"              "Role-Playing"
## [550] "Simulation"       "Strategy"          "Adventure"
## [553] "Action"           "Action"            "Racing"
## [556] "Adventure"        "Racing"            "Simulation"
## [559] "Shooter"          "Adventure"         "Action"
## [562] "Action"           "Shooter"           "Shooter"
## [565] "Party"            "Shooter"           "Role-Playing"
## [568] "Adventure"        "Sports"            "Action"
## [571] "Platform"         "Puzzle"            "Role-Playing"
## [574] "Sports"           "Simulation"        "Simulation"
## [577] "Action"           "Action"            "Action"
## [580] "Adventure"        "Fighting"          "Action"
## [583] "Action"           "Action-Adventure"  "Fighting"
## [586] "Strategy"         "Sports"            "Shooter"
## [589] "Action"           "Music"             "Platform"
## [592] "Puzzle"           "Adventure"         "Strategy"
## [595] "Role-Playing"     "Sports"            "Adventure"
## [598] "Racing"           "Shooter"           "Puzzle"
## [601] "Misc"             "Action"            "Action"
## [604] "Platform"         "Role-Playing"      "Strategy"
## [607] "Simulation"       "Action"            "Action"
## [610] "Action"           "Fighting"          "Action"
## [613] "Adventure"        "Action"            "Misc"
## [616] "Fighting"         "Racing"            "Misc"
## [619] "Sports"           "Misc"              "Puzzle"
## [622] "Strategy"         "Racing"            "Action"
## [625] "Action"           "Music"             "Adventure"
## [628] "Adventure"        "Platform"          "Fighting"
## [631] "Action"           "Visual Novel"      "Adventure"
## [634] "Role-Playing"     "Visual Novel"      "Action"
## [637] "Misc"             "Role-Playing"      "Shooter"
## [640] "Action"           "Sports"            "Role-Playing"
## [643] "Role-Playing"     "Music"             "Action-Adventure"
## [646] "Shooter"          "Racing"            "Action-Adventure"
## [649] "Action"           "Music"             "Action"
## [652] "Shooter"          "Role-Playing"      "Puzzle"
## [655] "Strategy"         "Strategy"          "Action"
## [658] "Strategy"         "Action"            "Music"
## [661] "Action"           "Action"            "Action"
## [664] "Puzzle"           "Misc"              "Visual Novel"
## [667] "Misc"             "Role-Playing"      "Fighting"
```

```
## [670] "Simulation"       "Misc"         "Racing"
## [673] "Visual Novel"     "Fighting"     "Shooter"
## [676] "Shooter"          "Action"       "Action"
## [679] "Role-Playing"     "Action"       "Adventure"
## [682] "Role-Playing"     "Adventure"    "Strategy"
## [685] "Misc"             "Strategy"     "Role-Playing"
## [688] "Adventure"        "Adventure"    "Strategy"
## [691] "Adventure"        "Simulation"   "Adventure"
## [694] "Action"           "Racing"       "Shooter"
## [697] "Visual Novel"     "Racing"       "Platform"
## [700] "Strategy"         "Action"       "Action"
## [703] "Adventure"        "Adventure"    "Strategy"
## [706] "Action"           "Action"       "Role-Playing"
## [709] "Platform"         "Action"       "Action"
## [712] "Platform"         "Sports"       "Misc"
## [715] "Action"           "Adventure"    "Adventure"
## [718] "Action"           "Adventure"    "Sports"
## [721] "Puzzle"           "Action"       "Action"
## [724] "Action"           "Platform"     "Adventure"
## [727] "Platform"         "Adventure"    "Platform"
## [730] "Action"           "Misc"         "Action"
## [733] "Shooter"          "Misc"         "Adventure"
## [736] "Role-Playing"     "MMO"          "Misc"
## [739] "Misc"             "Adventure"    "Strategy"
## [742] "Misc"             "Misc"         "Misc"
## [745] "Adventure"        "Shooter"      "Role-Playing"
## [748] "Role-Playing"     "Misc"         "Shooter"
## [751] "Action"           "Action"       "Misc"
## [754] "Role-Playing"     "Misc"         "Misc"
## [757] "Fighting"         "Adventure"    "Adventure"
## [760] "Action"           "Action"       "Role-Playing"
## [763] "Action"           "Misc"         "Misc"
## [766] "Platform"         "Fighting"     "Adventure"
## [769] "Misc"             "Shooter"      "Misc"
## [772] "Role-Playing"     "Adventure"    "Misc"
## [775] "Adventure"        "Platform"     "Role-Playing"
## [778] "Adventure"        "Misc"         "Action"
## [781] "Adventure"        "Misc"         "Misc"
## [784] "Action-Adventure" "Misc"         "Role-Playing"
## [787] "Misc"             "Misc"         "Misc"
## [790] "Action"           "Misc"         "Misc"
## [793] "Misc"             "Misc"         "Adventure"
## [796] "Action"           "Misc"         "Misc"
## [799] "Role-Playing"     "Action"       "Puzzle"
## [802] "Misc"             "Puzzle"       "Role-Playing"
## [805] "Misc"             "Misc"         "Misc"
## [808] "Action"           "Misc"         "Misc"
## [811] "Misc"             "Puzzle"       "Misc"
## [814] "Misc"             "Misc"         "Misc"
## [817] "Misc"             "Action"       "Strategy"
## [820] "Platform"         "Action"       "MMO"
## [823] "Misc"             "Misc"         "Simulation"
## [826] "Action"           "Misc"         "Platform"
## [829] "Adventure"        "Misc"         "Action"
## [832] "Misc"             "Misc"         "Misc"
## [835] "Action"           "Action"       "Shooter"
```

```
##  [838] "Adventure"        "Action"             "Misc"
##  [841] "Action-Adventure" "Misc"               "Misc"
##  [844] "Misc"             "Misc"               "Puzzle"
##  [847] "Misc"             "Misc"               "Misc"
##  [850] "Sports"           "Misc"               "Misc"
##  [853] "Misc"             "Misc"               "Adventure"
##  [856] "Adventure"        "Misc"               "Misc"
##  [859] "Misc"             "Misc"               "Misc"
##  [862] "Action"           "Misc"               "Misc"
##  [865] "Misc"             "Misc"               "Adventure"
##  [868] "Role-Playing"     "Misc"               "Misc"
##  [871] "Misc"             "Misc"               "Misc"
##  [874] "Adventure"        "Misc"               "Misc"
##  [877] "Shooter"          "Misc"               "Misc"
##  [880] "Misc"             "Misc"               "Puzzle"
##  [883] "Misc"             "Misc"               "Adventure"
##  [886] "Action"           "Misc"               "Misc"
##  [889] "Misc"             "Misc"               "Misc"
##  [892] "Misc"             "Misc"               "Adventure"
##  [895] "Misc"             "Platform"           "Misc"
##  [898] "Platform"         "Action"             "Misc"
##  [901] "Action"           "Adventure"          "Role-Playing"
##  [904] "Action"           "Role-Playing"       "Role-Playing"
##  [907] "Shooter"          "Action"             "Sports"
##  [910] "Action"           "Action"             "Action"
##  [913] "Platform"         "Action"             "Action"
##  [916] "Adventure"        "Puzzle"             "Action"
##  [919] "Action"           "Adventure"          "Action"
##  [922] "Racing"           "Role-Playing"       "Action"
##  [925] "Action"           "Action"             "Adventure"
##  [928] "Puzzle"           "Action"             "Action"
##  [931] "Strategy"         "Action"             "Shooter"
##  [934] "Adventure"        "Shooter"            "Shooter"
##  [937] "Action"           "Strategy"           "Action"
##  [940] "Action"           "Action"             "Action"
##  [943] "Adventure"        "Adventure"          "Action"
##  [946] "Sports"           "Adventure"          "Action"
##  [949] "Role-Playing"     "Simulation"         "Shooter"
##  [952] "Shooter"          "Action"             "Action"
##  [955] "Role-Playing"     "Shooter"            "Adventure"
##  [958] "Action"           "Action"             "Action"
##  [961] "Shooter"          "Shooter"            "Platform"
##  [964] "Action"           "Action-Adventure"   "Misc"
##  [967] "Platform"         "Action"             "Adventure"
##  [970] "Platform"         "Platform"           "Action"
##  [973] "Action"           "Action"             "Sports"
##  [976] "Strategy"         "Role-Playing"       "Action"
##  [979] "Adventure"        "Platform"           "Action"
##  [982] "Role-Playing"     "Role-Playing"       "Role-Playing"
##  [985] "Action"           "Action"             "Adventure"
##  [988] "Role-Playing"     "Platform"           "Action"
##  [991] "Music"            "Action"             "Shooter"
##  [994] "Role-Playing"     "Simulation"         "Role-Playing"
##  [997] "Misc"             "Simulation"         "Action"
## [1000] "Action"           "Adventure"          "Action"
## [1003] "Role-Playing"     "Misc"               "Role-Playing"
```

```
## [1006] "Action"            "Sports"           "Action"
## [1009] "Action-Adventure" "Action"           "Action"
## [1012] "Action"            "Action"           "Action-Adventure"
## [1015] "Action"            "Platform"         "Action"
## [1018] "Sports"            "Shooter"          "Action"
## [1021] "Shooter"           "Role-Playing"     "Role-Playing"
## [1024] "Strategy"          "Action"           "Action"
## [1027] "Platform"          "Adventure"        "Action"
## [1030] "Role-Playing"      "Racing"           "Action"
## [1033] "Action"            "Action"
```

```
table(a$Publisher)
```

```
##
##                   Paradox Interactive\xca                  Endnight Games Ltd\xca
##                                       1                                        1
##                                                                        2K Games
##                                     209                                        7
##                               2K Sports                                3D Realms
##                                       7                                        1
##                               505 Games                                      5pb
##                                      16                                        8
##                                Accolade                                  Acquire
##                                       1                                        2
##                     Active Gaming Media                               Activision
##                                       1                                       30
##                             Aksys Games                     Alternative Software
##                                       4                                        1
##                        Arc System Works                                 Astragon
##                                       4                                        1
##                                   Atari                                    Atlus
##                                       2                                        1
##                               Avanquest                            Badland Studio
##                                       2                                        3
##             Bandai Namco Entertainment                        Bandai Namco Games
##                                       1                                        3
##                      Bethesda Softworks                        Big Ben Interactive
##                                      17                                        1
##                      Bigben Interactive                                  BioWare
##                                       7                                        1
##                   Blizzard Entertainment                                  Capcom
##                                       2                                       30
##                  CD Projekt Red Studio                         City Interactive
##                                       1                                        1
##                             Codemasters                         CokeM Interactive
##                                       6                                        1
##                           Compile Heart                         Compulsion Games
##                                       4                                        1
##                                 Cygames                               D3Publisher
##                                       1                                        3
##                  Daedalic Entertainment                              Deep Silver
##                                       1                                       18
##                        Devolver Digital               Disney Interactive Studios
##                                       1                                        2
##                               DMM Games                       Double Damage Games
##                                       1                                        1
##                       DTP Entertainment                 Dusenberry Martin Racing
##                                       1                                        1
##                               EA Sports                          Electronic Arts
##                                      19                                       21
##                               Entergram                         FarSight Studios
##                                       1                                        1
##                 Focus Home Interactive                         Frictional Games
##                                      14                                        1
##                  Frontier Developments                             Funbox Media
##                                       1                                        1
##                              Futurlab 1                              Gaijinworks
##                                       1                                        1
```

```
##                          GameMill           GameMill Entertainment
##                                 2                                1
##                    Games Workshop                         GameTrust
##                                 1                                2
##                  Gearbox Software                          Grey Box
##                                 4                                1
##                         Gun Media                            GungHo
##                                 1                                2
##        Gunho Online Entertainment                              Gust
##                                 1                                1
##            Harmonix Music Systems                       Hello Games
##                                 1                                1
##                   Ice-pick Lodge        Idea Factory International
##                                 1                                4
##                  Insomniac Games            Introversion Software
##                                 1                                1
##                   Kadokawa Games                     Kalypso Media
##                                 3                               12
##                       Koch Media                        Koei Tecmo
##                                 7                                1
##     Konami Digital Entertainment                   League of Geeks
##                                12                                1
##                          Level 5                      Little Orbit
##                                 1                                3
##                               M2              Marvelous Interactive
##                                 1                                2
##                   Maximum Games                        Mediascape
##                                13                                1
##                      Merge Games                          Microids
##                                 2                                3
##                        Milestone                   Milestone S.r.l
##                                 1                                2
##                  Milestone S.r.l.                           MLB.com
##                                 5                                4
##                           Mojang               Namco Bandai Games
##                                 1                               56
##                          Nicalis              Nighthawk Interactive
##                                 2                                5
##         Nihon Falcom Corporation            Nippon Ichi Software
##                                 2                                6
##                       NIS America                     Nordic Games
##                                21                                8
##                  Nowhere Studios                   Outright Games
##                                 1                                1
##     Perfect World Entertainment                        Perp Games
##                                 1                                1
##                        PM Studios                             PQube
##                                 1                               18
##                       Rain Games                       Ravenscourt
##                                 1                                2
##                     Ready at Dawn                         Rebellion
##                                 1                                1
##           Rebellion Developments                     Renegade Kid
##                                 2                                1
##              Revolution Software               Rising Star Games
##                                 1                                5
```

```
##                       Rockstar Games                             Sega
##                                   3                               15
##                           Sinxsoft                         Soedesco
##                                   1                                9
##                           Sold Out    Sony Computer Entertainment
##                                   4                               25
##     Sony Interactive Entertainment      Sony Online Entertainment
##                                  47                                2
##                     Spike Chunsoft                           Sprite
##                                   1                                1
##                        Square Enix                  Stainless Games
##                                  40                                2
##                    Studio Wildcard                        System 3
##                                   1                                2
##                Take-Two Interactive                      Taleworlds
##                                   1                                1
##                      Tammeka Games                       Team Meat
##                                   1                                1
##                 Team17 Digital Ltd                  Team17 Software
##                                   1                                1
##                           Techland                      Tecmo Koei
##                                   2                               37
##                     Telltale Games                   The Astronauts
##                                   8                                1
##                       Thekla, Inc.                      THQ Nordic
##                                   1                               15
##                  TopWare Interactive              Triniti Interactive
##                                   1                                1
##                 Tripwire Interactive        Tru Blu Entertainment
##                                   1                                4
##                          Two Tribes                         Ubisoft
##                                   1                               45
##                      UFO Interactive              UIG Entertainment
##                                   1                                2
##                            Unknown                     Versus Evil
##                                  12                                1
##                         Wander MMO       Warner Bros. Interactive
##                                   1                                2
## Warner Bros. Interactive Entertainment        Wired Productions
##                                  27                                3
##                         Xseed Games               Yacht Club Games
##                                   1                                1
##                               Yeti
##                                   1
```

```
str(a$Genre)
```

```
##  chr [1:1034] "Action" "Shooter" "Action-Adventure" "Shooter" "Sports" ...
```

#transforming the variables

```
log(a$Global)
```

```
##   [1]  2.964757469  2.714032273  2.634762405  2.595254707  2.468099531
##   [6]  2.392425797  2.335052283  2.170195905  2.137710450  2.137710450
##  [11]  2.106570209  2.083184528  2.018895042  1.982379829  1.912501087
##  [16]  1.845300236  1.843719208  1.816452082  1.761300262  1.750937475
##  [21]  1.740466175  1.684545385  1.623340818  1.574846468  1.541159072
##  [26]  1.512927012  1.510721939  1.474763009  1.472472057  1.463255402
##  [31]  1.427916036  1.420695788  1.420695788  1.413423029  1.401182974
##  [36]  1.401182974  1.381281819  1.373715579  1.371180723  1.327075001
##  [41]  1.280933845  1.258460990  1.249901736  1.232560261  1.211940974
##  [46]  1.211940974  1.205970807  1.196948189  1.193922468  1.187843422
##  [51]  1.160020917  1.160020917  1.137833002  1.134622726  1.111857515
##  [56]  1.105256831  1.101940079  1.071583616  1.054312030  1.036736885
##  [61]  1.004301609  1.000631880  0.963174318  0.912282710  0.896088025
##  [66]  0.883767540  0.867100488  0.862889955  0.862889955  0.850150929
##  [71]  0.815364813  0.810930216  0.779324877  0.779324877  0.774727168
##  [76]  0.770108222  0.765467842  0.727548607  0.722705983  0.717839793
##  [81]  0.712949808  0.712949808  0.703097511  0.683096845  0.678033543
##  [86]  0.647103242  0.641853886  0.631271777  0.620576488  0.582215620
##  [91]  0.559615788  0.559615788  0.542324291  0.542324291  0.536493371
##  [96]  0.530628251  0.494696242  0.482426149  0.476234179  0.451075619
## [101]  0.431782416  0.431782416  0.412109651  0.405465108  0.405465108
## [106]  0.398776120  0.378436436  0.357674444  0.329303747  0.329303747
## [111]  0.307484700  0.285178942  0.270027137  0.270027137  0.254642218
## [116]  0.254642218  0.246860078  0.246860078  0.198850859  0.190620360
## [121]  0.182321557  0.182321557  0.182321557  0.182321557  0.173953307
## [126]  0.165514438  0.165514438  0.148420005  0.148420005  0.131028262
## [131]  0.122217633  0.104360015  0.104360015  0.095310180  0.086177696
## [136]  0.058268908  0.048790164  0.039220713  0.039220713  0.029558802
## [141]  0.009950331  0.009950331  0.009950331  0.009950331 -0.020202707
## [146] -0.030459207 -0.040821995 -0.040821995 -0.061875404 -0.105360516
## [151] -0.116533816 -0.116533816 -0.116533816 -0.127833372 -0.139262067
## [156] -0.150822890 -0.162518929 -0.162518929 -0.162518929 -0.162518929
## [161] -0.198450939 -0.198450939 -0.210721031 -0.210721031 -0.235722334
## [166] -0.235722334 -0.248461359 -0.248461359 -0.248461359 -0.274436846
## [171] -0.287682072 -0.287682072 -0.287682072 -0.287682072 -0.301105093
## [176] -0.314710745 -0.328504067 -0.328504067 -0.342490309 -0.356674944
## [181] -0.371063681 -0.371063681 -0.385662481 -0.385662481 -0.400477567
## [186] -0.415515444 -0.415515444 -0.430782916 -0.430782916 -0.430782916
## [191] -0.446287103 -0.462035460 -0.478035801 -0.478035801 -0.478035801
## [196] -0.478035801 -0.494296322 -0.510825624 -0.527632742 -0.544727175
## [201] -0.544727175 -0.562118918 -0.562118918 -0.562118918 -0.562118918
## [206] -0.579818495 -0.579818495 -0.579818495 -0.579818495 -0.579818495
## [211] -0.597837001 -0.597837001 -0.597837001 -0.597837001 -0.653926467
## [216] -0.653926467 -0.653926467 -0.673344553 -0.693147181 -0.693147181
## [221] -0.713349888 -0.733969175 -0.733969175 -0.733969175 -0.733969175
## [226] -0.733969175 -0.733969175 -0.755022584 -0.755022584 -0.755022584
## [231] -0.755022584 -0.755022584 -0.776528789 -0.798507696 -0.798507696
## [236] -0.798507696 -0.798507696 -0.820980552 -0.820980552 -0.843970070
## [241] -0.843970070 -0.867500568 -0.867500568 -0.867500568 -0.891598119
## [246] -0.891598119 -0.891598119 -0.941608540 -0.941608540 -0.941608540
## [251] -0.967584026 -0.994252273 -0.994252273 -0.994252273 -0.994252273
## [256] -1.021651248 -1.021651248 -1.021651248 -1.021651248 -1.049822124
## [261] -1.049822124 -1.049822124 -1.078809661 -1.078809661 -1.078809661
## [266] -1.108662625 -1.108662625 -1.108662625 -1.139434283 -1.171182982
## [271] -1.171182982 -1.171182982 -1.171182982 -1.171182982 -1.171182982
```

```
##   [276] -1.203972804 -1.203972804 -1.203972804 -1.203972804 -1.237874356
##   [281] -1.237874356 -1.237874356 -1.237874356 -1.237874356 -1.237874356
##   [286] -1.272965676 -1.272965676 -1.272965676 -1.272965676 -1.272965676
##   [291] -1.272965676 -1.309333320 -1.309333320 -1.309333320 -1.309333320
##   [296] -1.309333320 -1.309333320 -1.347073648 -1.386294361 -1.386294361
##   [301] -1.386294361 -1.386294361 -1.427116356 -1.427116356 -1.427116356
##   [306] -1.427116356 -1.427116356 -1.427116356 -1.427116356 -1.427116356
##   [311] -1.427116356 -1.427116356 -1.427116356 -1.427116356 -1.469675970
##   [316] -1.469675970 -1.469675970 -1.469675970 -1.469675970 -1.469675970
##   [321] -1.469675970 -1.469675970 -1.514127733 -1.514127733 -1.514127733
##   [326] -1.514127733 -1.514127733 -1.514127733 -1.514127733 -1.560647748
##   [331] -1.560647748 -1.560647748 -1.560647748 -1.560647748 -1.560647748
##   [336] -1.560647748 -1.560647748 -1.609437912 -1.609437912 -1.609437912
##   [341] -1.609437912 -1.660731207 -1.660731207 -1.660731207 -1.660731207
##   [346] -1.660731207 -1.714798428 -1.714798428 -1.714798428 -1.714798428
##   [351] -1.771956842 -1.771956842 -1.771956842 -1.771956842 -1.771956842
##   [356] -1.771956842 -1.771956842 -1.771956842 -1.832581464 -1.832581464
##   [361] -1.832581464 -1.832581464 -1.832581464 -1.832581464 -1.832581464
##   [366] -1.832581464 -1.832581464 -1.832581464 -1.832581464 -1.897119985
##   [371] -1.897119985 -1.897119985 -1.897119985 -1.897119985 -1.897119985
##   [376] -1.897119985 -1.897119985 -1.897119985 -1.897119985 -1.966112856
##   [381] -1.966112856 -1.966112856 -1.966112856 -1.966112856 -1.966112856
##   [386] -1.966112856 -1.966112856 -1.966112856 -1.966112856 -1.966112856
##   [391] -1.966112856 -1.966112856 -1.966112856 -2.040220829 -2.040220829
##   [396] -2.040220829 -2.040220829 -2.040220829 -2.040220829 -2.040220829
##   [401] -2.040220829 -2.040220829 -2.040220829 -2.040220829 -2.040220829
##   [406] -2.040220829 -2.040220829 -2.120263536 -2.120263536 -2.120263536
##   [411] -2.120263536 -2.120263536 -2.120263536 -2.120263536 -2.120263536
##   [416] -2.120263536 -2.207274913 -2.207274913 -2.207274913 -2.207274913
##   [421] -2.207274913 -2.207274913 -2.207274913 -2.207274913 -2.207274913
##   [426] -2.207274913 -2.207274913 -2.207274913 -2.207274913 -2.207274913
##   [431] -2.207274913 -2.207274913 -2.207274913 -2.302585093 -2.302585093
##   [436] -2.302585093 -2.302585093 -2.302585093 -2.302585093 -2.302585093
##   [441] -2.302585093 -2.302585093 -2.302585093 -2.302585093 -2.302585093
##   [446] -2.302585093 -2.302585093 -2.302585093 -2.302585093 -2.302585093
##   [451] -2.407945609 -2.407945609 -2.407945609 -2.407945609 -2.407945609
##   [456] -2.407945609 -2.407945609 -2.407945609 -2.407945609 -2.407945609
##   [461] -2.407945609 -2.407945609 -2.407945609 -2.407945609 -2.407945609
##   [466] -2.407945609 -2.407945609 -2.525728644 -2.525728644 -2.525728644
##   [471] -2.525728644 -2.525728644 -2.525728644 -2.525728644 -2.525728644
##   [476] -2.525728644 -2.525728644 -2.525728644 -2.525728644 -2.525728644
##   [481] -2.525728644 -2.659260037 -2.659260037 -2.659260037 -2.659260037
##   [486] -2.659260037 -2.659260037 -2.659260037 -2.659260037 -2.659260037
##   [491] -2.659260037 -2.659260037 -2.659260037 -2.659260037 -2.659260037
##   [496] -2.659260037 -2.659260037 -2.659260037 -2.659260037 -2.659260037
##   [501] -2.659260037 -2.659260037 -2.659260037 -2.659260037 -2.659260037
##   [506] -2.659260037 -2.659260037 -2.659260037 -2.659260037 -2.813410717
##   [511] -2.813410717 -2.813410717 -2.813410717 -2.813410717 -2.813410717
##   [516] -2.813410717 -2.813410717 -2.813410717 -2.813410717 -2.813410717
##   [521] -2.813410717 -2.813410717 -2.813410717 -2.813410717 -2.813410717
##   [526] -2.813410717 -2.813410717 -2.813410717 -2.813410717 -2.813410717
##   [531] -2.813410717 -2.813410717 -2.813410717 -2.813410717 -2.813410717
##   [536] -2.813410717 -2.995732274 -2.995732274 -2.995732274 -2.995732274
##   [541] -2.995732274 -2.995732274 -2.995732274 -2.995732274 -2.995732274
##   [546] -2.995732274 -2.995732274 -2.995732274 -2.995732274 -2.995732274
##   [551] -2.995732274 -2.995732274 -2.995732274 -2.995732274 -2.995732274
```

```
##  [556] -2.995732274 -2.995732274 -2.995732274 -2.995732274 -2.995732274
##  [561] -2.995732274 -2.995732274 -3.218875825 -3.218875825 -3.218875825
##  [566] -3.218875825 -3.218875825 -3.218875825 -3.218875825 -3.218875825
##  [571] -3.218875825 -3.218875825 -3.218875825 -3.218875825 -3.218875825
##  [576] -3.218875825 -3.218875825 -3.218875825 -3.218875825 -3.218875825
##  [581] -3.218875825 -3.218875825 -3.218875825 -3.218875825 -3.218875825
##  [586] -3.218875825 -3.218875825 -3.218875825 -3.218875825 -3.218875825
##  [591] -3.218875825 -3.218875825 -3.218875825 -3.218875825 -3.218875825
##  [596] -3.218875825 -3.218875825 -3.218875825 -3.218875825 -3.218875825
##  [601] -3.218875825 -3.506557897 -3.506557897 -3.506557897 -3.506557897
##  [606] -3.506557897 -3.506557897 -3.506557897 -3.506557897 -3.506557897
##  [611] -3.506557897 -3.506557897 -3.506557897 -3.506557897 -3.506557897
##  [616] -3.506557897 -3.506557897 -3.506557897 -3.506557897 -3.506557897
##  [621] -3.506557897 -3.506557897 -3.506557897 -3.506557897 -3.506557897
##  [626] -3.506557897 -3.506557897 -3.506557897 -3.506557897 -3.506557897
##  [631] -3.506557897 -3.506557897 -3.506557897 -3.506557897 -3.506557897
##  [636] -3.506557897 -3.506557897 -3.506557897 -3.506557897 -3.912023005
##  [641] -3.912023005 -3.912023005 -3.912023005 -3.912023005 -3.912023005
##  [646] -3.912023005 -3.912023005 -3.912023005 -3.912023005 -3.912023005
##  [651] -3.912023005 -3.912023005 -3.912023005 -3.912023005 -3.912023005
##  [656] -3.912023005 -3.912023005 -3.912023005 -3.912023005 -3.912023005
##  [661] -3.912023005 -3.912023005 -3.912023005 -3.912023005 -3.912023005
##  [666] -3.912023005 -3.912023005 -3.912023005 -3.912023005 -3.912023005
##  [671] -3.912023005 -3.912023005 -3.912023005 -3.912023005 -3.912023005
##  [676] -3.912023005 -3.912023005 -3.912023005 -4.605170186 -4.605170186
##  [681] -4.605170186 -4.605170186 -4.605170186 -4.605170186 -4.605170186
##  [686] -4.605170186 -4.605170186 -4.605170186 -4.605170186 -4.605170186
##  [691] -4.605170186 -4.605170186 -4.605170186 -4.605170186 -4.605170186
##  [696] -4.605170186 -4.605170186 -4.605170186 -4.605170186 -4.605170186
##  [701] -4.605170186 -4.605170186 -4.605170186 -4.605170186 -4.605170186
##  [706] -4.605170186 -4.605170186 -4.605170186 -4.605170186 -4.605170186
##  [711] -4.605170186 -4.605170186         -Inf         -Inf         -Inf
##  [716]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [721]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [726]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [731]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [736]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [741]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [746]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [751]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [756]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [761]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [766]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [771]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [776]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [781]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [786]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [791]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [796]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [801]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [806]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [811]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [816]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [821]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [826]         -Inf         -Inf         -Inf         -Inf         -Inf
##  [831]         -Inf         -Inf         -Inf         -Inf         -Inf
```

```
##  [836]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [841]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [846]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [851]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [856]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [861]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [866]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [871]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [876]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [881]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [886]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [891]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [896]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [901]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [906]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [911]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [916]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [921]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [926]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [931]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [936]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [941]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [946]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [951]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [956]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [961]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [966]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [971]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [976]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [981]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [986]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [991]       -Inf       -Inf       -Inf       -Inf       -Inf
##  [996]       -Inf       -Inf       -Inf       -Inf       -Inf
## [1001]       -Inf       -Inf       -Inf       -Inf       -Inf
## [1006]       -Inf       -Inf       -Inf       -Inf       -Inf
## [1011]       -Inf       -Inf       -Inf       -Inf       -Inf
## [1016]       -Inf       -Inf       -Inf       -Inf       -Inf
## [1021]       -Inf       -Inf       -Inf       -Inf       -Inf
## [1026]       -Inf       -Inf       -Inf       -Inf       -Inf
## [1031]       -Inf       -Inf       -Inf       -Inf
```

```
log(a$Rest.of.World)
```

```
##    [1]  1.10525683  0.89199804  0.81536481  0.75141609  0.54812141  0.47623418
##    [7]  0.53062825  0.34358970  0.30748470  0.29266961  0.20701417  0.26236426
##   [13]  0.19885086  0.11332869  0.09531018 -0.04082199 -0.06187540  0.01980263
##   [19] -0.08338161 -0.06187540 -0.06187540 -0.21072103 -0.38566248 -0.30110509
##   [25] -0.86750057 -0.31471074 -0.31471074 -0.37106368 -0.44628710 -0.38566248
##   [31] -0.37106368 -0.43078292 -0.37106368 -0.41551544 -0.46203546 -0.46203546
##   [37] -0.34249031 -0.47803580 -0.47803580 -0.61618614 -0.59783700 -0.46203546
##   [43] -0.49429632 -0.67334455 -0.61618614 -0.65392647 -0.52763274 -0.77652879
##   [49] -0.49429632 -0.51082562 -0.67334455 -0.67334455 -0.75502258 -0.73396918
##   [55] -0.86750057 -0.75502258 -0.69314718 -0.77652879 -0.82098055 -0.82098055
##   [61] -0.89159812 -0.89159812 -0.75502258 -0.82098055 -0.91629073 -1.07880966
##   [67] -0.94160854 -1.02165125 -1.02165125 -0.96758403 -0.99425227 -0.89159812
##   [73] -1.07880966 -1.02165125 -1.04982212 -1.13943428 -1.10866262 -1.13943428
##   [79] -1.07880966 -1.10866262 -1.10866262 -2.30258509 -1.17118298 -1.20397280
##   [85] -1.17118298 -1.20397280 -1.20397280 -1.46967597 -1.27296568 -1.30933332
##   [91] -1.34707365 -1.27296568 -1.27296568 -1.23787436 -1.51412773 -1.34707365
##   [97] -1.60943791 -1.38629436 -1.38629436 -1.42711636 -1.42711636 -1.30933332
##  [103] -1.46967597 -1.46967597 -1.46967597 -1.38629436 -1.46967597 -1.42711636
##  [109] -1.51412773 -1.51412773 -1.51412773 -1.51412773 -1.60943791 -1.56064775
##  [115] -1.66073121 -1.56064775 -1.51412773 -1.66073121 -1.66073121 -1.60943791
##  [121] -1.77195684 -1.66073121 -1.66073121 -1.77195684 -1.77195684 -1.60943791
##  [127] -1.66073121 -1.66073121 -1.51412773 -1.77195684 -1.66073121 -1.71479843
##  [133] -1.71479843 -1.89711998 -1.83258146 -1.60943791 -1.89711998 -1.83258146
##  [139] -1.89711998 -1.96611286 -1.66073121 -1.89711998 -1.83258146 -1.83258146
##  [145] -1.77195684 -1.83258146 -1.77195684 -1.71479843 -1.83258146 -1.96611286
##  [151] -2.04022083 -1.89711998 -1.89711998 -2.04022083 -1.96611286 -1.96611286
##  [157] -2.04022083 -1.89711998 -1.96611286 -2.04022083 -2.12026354 -2.30258509
##  [163] -2.20727491 -2.65926004 -2.12026354 -2.12026354 -2.12026354 -2.20727491
##  [169] -2.20727491 -2.30258509 -2.12026354 -2.40794561 -2.04022083 -2.40794561
##  [175] -2.12026354 -1.96611286 -2.20727491 -2.12026354 -2.20727491 -2.20727491
##  [181] -2.30258509 -2.99573227 -2.30258509 -2.30258509 -2.12026354 -2.12026354
##  [187] -2.20727491 -2.65926004 -2.52572864 -2.40794561 -2.30258509 -2.30258509
##  [193] -2.30258509 -2.40794561 -2.40794561 -2.20727491 -2.40794561 -2.30258509
##  [199] -2.40794561 -2.40794561 -2.81341072 -2.40794561 -2.65926004 -2.30258509
##  [205] -2.30258509 -2.81341072 -2.40794561 -2.40794561 -2.40794561 -2.40794561
##  [211] -2.40794561 -2.40794561 -2.40794561 -2.52572864 -2.40794561 -2.40794561
##  [217] -2.81341072 -2.52572864 -2.65926004 -2.81341072 -2.65926004 -2.81341072
##  [223] -2.52572864 -2.52572864 -2.52572864 -2.65926004 -2.65926004 -2.52572864
##  [229] -3.50655790 -2.65926004 -2.65926004 -2.52572864 -2.99573227 -2.52572864
##  [235] -3.21887582 -2.65926004 -2.99573227 -2.65926004 -2.52572864 -2.65926004
##  [241] -2.65926004 -2.81341072 -2.81341072 -2.81341072 -2.65926004 -2.65926004
##  [247] -2.99573227 -2.65926004 -2.65926004 -2.81341072 -2.99573227 -2.99573227
##  [253] -2.99573227 -3.50655790 -2.81341072 -2.81341072 -2.81341072 -3.50655790
##  [259] -2.81341072 -2.99573227 -3.21887582 -3.21887582 -3.21887582 -2.99573227
##  [265] -2.99573227 -2.99573227 -3.21887582 -2.99573227 -2.99573227 -3.21887582
##  [271] -2.99573227 -2.99573227 -2.99573227 -2.99573227 -3.21887582 -2.99573227
##  [277] -3.21887582 -2.99573227 -2.99573227 -3.50655790 -2.99573227 -2.99573227
##  [283] -3.21887582 -3.21887582 -2.99573227 -2.99573227 -3.21887582 -2.99573227
##  [289] -3.21887582 -3.21887582 -3.91202301 -2.99573227 -3.21887582 -2.99573227
##  [295] -2.99573227 -3.21887582 -3.50655790 -3.21887582 -3.50655790 -3.50655790
##  [301] -3.21887582 -3.21887582 -2.99573227 -3.21887582 -3.50655790 -3.50655790
##  [307] -3.21887582 -3.21887582 -3.21887582 -3.21887582        -Inf -3.21887582
##  [313] -3.21887582 -3.21887582 -3.21887582 -3.21887582 -3.21887582 -3.21887582
##  [319] -3.21887582 -3.50655790 -3.50655790 -3.50655790 -3.21887582 -3.50655790
##  [325] -3.21887582 -3.50655790 -3.50655790 -3.50655790 -3.21887582 -3.21887582
```

```
## [331] -3.91202301 -3.91202301 -3.21887582 -3.21887582 -3.50655790 -3.50655790
## [337] -3.50655790 -3.50655790 -3.50655790 -3.50655790 -3.50655790 -3.50655790
## [343] -3.50655790 -3.50655790 -3.50655790 -3.50655790 -3.91202301 -3.91202301
## [349] -3.91202301 -3.50655790 -3.50655790 -3.91202301 -3.91202301 -3.91202301
## [355] -3.91202301 -3.50655790 -3.91202301 -3.50655790 -3.50655790 -3.50655790
## [361] -3.50655790 -3.91202301 -3.50655790 -3.91202301 -3.91202301 -3.91202301
## [367] -3.50655790 -3.91202301 -3.91202301 -3.50655790 -3.91202301 -3.91202301
## [373] -3.91202301 -4.60517019 -3.50655790         -Inf -4.60517019 -3.50655790
## [379]         -Inf -3.91202301 -4.60517019 -3.91202301 -4.60517019 -3.91202301
## [385] -3.91202301 -3.91202301 -4.60517019 -3.91202301 -3.50655790 -3.91202301
## [391] -3.91202301 -3.91202301 -4.60517019 -4.60517019 -3.91202301 -3.91202301
## [397] -3.91202301 -3.91202301 -3.91202301 -3.91202301 -3.91202301 -3.91202301
## [403] -4.60517019         -Inf -4.60517019 -3.91202301 -3.91202301 -3.91202301
## [409] -3.91202301 -3.91202301 -4.60517019 -4.60517019 -3.91202301         -Inf
## [415] -3.91202301 -3.91202301 -3.91202301 -3.91202301 -3.91202301 -3.91202301
## [421] -3.91202301 -3.91202301 -3.91202301         -Inf -4.60517019         -Inf
## [427] -3.91202301         -Inf         -Inf         -Inf -3.91202301 -4.60517019
## [433] -3.91202301 -3.91202301 -4.60517019 -3.91202301 -4.60517019 -4.60517019
## [439] -4.60517019 -3.91202301         -Inf -3.91202301 -4.60517019 -3.91202301
## [445] -4.60517019 -3.91202301 -4.60517019 -4.60517019 -3.91202301 -3.91202301
## [451] -4.60517019 -3.91202301 -3.91202301         -Inf -4.60517019 -4.60517019
## [457] -4.60517019 -3.91202301         -Inf -3.91202301 -4.60517019 -4.60517019
## [463] -3.91202301 -3.91202301         -Inf -4.60517019         -Inf -3.91202301
## [469] -3.91202301 -4.60517019 -4.60517019 -4.60517019 -4.60517019 -3.91202301
## [475] -4.60517019 -3.91202301 -4.60517019 -4.60517019 -4.60517019 -4.60517019
## [481] -4.60517019 -4.60517019 -4.60517019 -4.60517019 -4.60517019         -Inf
## [487] -4.60517019         -Inf -4.60517019 -4.60517019 -4.60517019 -4.60517019
## [493] -4.60517019 -4.60517019 -4.60517019 -4.60517019         -Inf -4.60517019
## [499]         -Inf -4.60517019 -4.60517019 -4.60517019 -4.60517019 -4.60517019
## [505] -4.60517019 -4.60517019         -Inf -4.60517019 -4.60517019 -4.60517019
## [511]         -Inf -4.60517019 -4.60517019 -4.60517019 -4.60517019 -4.60517019
## [517] -4.60517019 -4.60517019         -Inf -4.60517019         -Inf         -Inf
## [523]         -Inf -4.60517019 -4.60517019 -4.60517019 -4.60517019 -4.60517019
## [529] -4.60517019 -4.60517019         -Inf -4.60517019 -4.60517019 -4.60517019
## [535] -4.60517019 -4.60517019 -4.60517019 -4.60517019 -4.60517019 -4.60517019
## [541] -4.60517019 -4.60517019         -Inf -4.60517019         -Inf         -Inf
## [547] -4.60517019 -4.60517019 -4.60517019 -4.60517019 -4.60517019 -4.60517019
## [553]         -Inf         -Inf -4.60517019 -4.60517019 -4.60517019 -4.60517019
## [559] -4.60517019 -4.60517019 -4.60517019 -4.60517019 -4.60517019 -4.60517019
## [565] -4.60517019 -4.60517019         -Inf -4.60517019 -4.60517019 -4.60517019
## [571] -4.60517019 -4.60517019         -Inf -4.60517019 -4.60517019 -4.60517019
## [577] -4.60517019 -4.60517019 -4.60517019 -4.60517019         -Inf -4.60517019
## [583] -4.60517019 -4.60517019         -Inf -4.60517019 -4.60517019 -4.60517019
## [589] -4.60517019 -4.60517019 -4.60517019 -4.60517019 -4.60517019 -4.60517019
## [595] -4.60517019 -4.60517019 -4.60517019 -4.60517019         -Inf -4.60517019
## [601]         -Inf         -Inf -4.60517019         -Inf -4.60517019         -Inf
## [607]         -Inf         -Inf         -Inf -4.60517019         -Inf -4.60517019
## [613] -4.60517019         -Inf         -Inf         -Inf -4.60517019         -Inf
## [619]         -Inf         -Inf -4.60517019 -4.60517019 -4.60517019         -Inf
## [625] -4.60517019 -4.60517019         -Inf -4.60517019 -4.60517019         -Inf
## [631]         -Inf         -Inf         -Inf         -Inf         -Inf         -Inf
## [637]         -Inf         -Inf         -Inf         -Inf         -Inf         -Inf
## [643]         -Inf         -Inf         -Inf         -Inf         -Inf         -Inf
## [649]         -Inf         -Inf         -Inf         -Inf         -Inf         -Inf
## [655]         -Inf         -Inf         -Inf         -Inf         -Inf         -Inf
## [661]         -Inf         -Inf         -Inf         -Inf         -Inf         -Inf
```

```
## [667]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [673]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [679]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [685]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [691]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [697]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [703]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [709]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [715]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [721]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [727]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [733]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [739]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [745]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [751]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [757]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [763]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [769]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [775]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [781]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [787]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [793]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [799]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [805]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [811]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [817]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [823]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [829]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [835]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [841]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [847]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [853]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [859]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [865]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [871]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [877]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [883]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [889]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [895]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [901]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [907]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [913]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [919]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [925]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [931]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [937]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [943]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [949]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [955]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [961]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [967]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [973]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [979]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [985]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [991]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
## [997]      -Inf       -Inf       -Inf       -Inf       -Inf       -Inf
```

```
## [1003]       -Inf        -Inf        -Inf        -Inf        -Inf        -Inf
## [1009]       -Inf        -Inf        -Inf        -Inf        -Inf        -Inf
## [1015]       -Inf        -Inf        -Inf        -Inf        -Inf        -Inf
## [1021]       -Inf        -Inf        -Inf        -Inf        -Inf        -Inf
## [1027]       -Inf        -Inf        -Inf        -Inf        -Inf        -Inf
## [1033]       -Inf        -Inf
```

```
c<-a$Global-mean(a$Global)/sd(a$Global)
c
```

```
## [1003]       -Inf        -Inf        -Inf        -Inf        -Inf        -Inf
## [1009]       -Inf        -Inf        -Inf        -Inf        -Inf        -Inf
## [1015]       -Inf        -Inf        -Inf        -Inf        -Inf        -Inf
## [1021]       -Inf        -Inf        -Inf        -Inf        -Inf        -Inf
## [1027]       -Inf        -Inf        -Inf        -Inf        -Inf        -Inf
## [1033]       -Inf        -Inf
```

```
##   [1] 19.026222371 14.726222371 13.576222371 13.036222371 11.436222371
##   [6] 10.576222371  9.966222371  8.396222371  8.116222371  8.116222371
##  [11]  7.856222371  7.666222371  7.166222371  6.896222371  6.406222371
##  [16]  5.966222371  5.956222371  5.786222371  5.456222371  5.396222371
##  [21]  5.336222371  5.026222371  4.706222371  4.466222371  4.306222371
##  [26]  4.176222371  4.166222371  4.006222371  3.996222371  3.956222371
##  [31]  3.806222371  3.776222371  3.776222371  3.746222371  3.696222371
##  [36]  3.696222371  3.616222371  3.586222371  3.576222371  3.406222371
##  [41]  3.236222371  3.156222371  3.126222371  3.066222371  2.996222371
##  [46]  2.996222371  2.976222371  2.946222371  2.936222371  2.916222371
##  [51]  2.826222371  2.826222371  2.756222371  2.746222371  2.676222371
##  [56]  2.656222371  2.646222371  2.556222371  2.506222371  2.456222371
##  [61]  2.366222371  2.356222371  2.256222371  2.126222371  2.086222371
##  [66]  2.056222371  2.016222371  2.006222371  2.006222371  1.976222371
##  [71]  1.896222371  1.886222371  1.816222371  1.816222371  1.806222371
##  [76]  1.796222371  1.786222371  1.706222371  1.696222371  1.686222371
##  [81]  1.676222371  1.676222371  1.656222371  1.616222371  1.606222371
##  [86]  1.546222371  1.536222371  1.516222371  1.496222371  1.426222371
##  [91]  1.386222371  1.386222371  1.356222371  1.356222371  1.346222371
##  [96]  1.336222371  1.276222371  1.256222371  1.246222371  1.206222371
## [101]  1.176222371  1.176222371  1.146222371  1.136222371  1.136222371
## [106]  1.126222371  1.096222371  1.066222371  1.026222371  1.026222371
## [111]  0.996222371  0.966222371  0.946222371  0.946222371  0.926222371
## [116]  0.926222371  0.916222371  0.916222371  0.856222371  0.846222371
## [121]  0.836222371  0.836222371  0.836222371  0.836222371  0.826222371
## [126]  0.816222371  0.816222371  0.796222371  0.796222371  0.776222371
## [131]  0.766222371  0.746222371  0.746222371  0.736222371  0.726222371
## [136]  0.696222371  0.686222371  0.676222371  0.676222371  0.666222371
## [141]  0.646222371  0.646222371  0.646222371  0.646222371  0.616222371
## [146]  0.606222371  0.596222371  0.596222371  0.576222371  0.536222371
## [151]  0.526222371  0.526222371  0.526222371  0.516222371  0.506222371
## [156]  0.496222371  0.486222371  0.486222371  0.486222371  0.486222371
## [161]  0.456222371  0.456222371  0.446222371  0.446222371  0.426222371
## [166]  0.426222371  0.416222371  0.416222371  0.416222371  0.396222371
## [171]  0.386222371  0.386222371  0.386222371  0.386222371  0.376222371
## [176]  0.366222371  0.356222371  0.356222371  0.346222371  0.336222371
## [181]  0.326222371  0.326222371  0.316222371  0.316222371  0.306222371
## [186]  0.296222371  0.296222371  0.286222371  0.286222371  0.286222371
## [191]  0.276222371  0.266222371  0.256222371  0.256222371  0.256222371
## [196]  0.256222371  0.246222371  0.236222371  0.226222371  0.216222371
## [201]  0.216222371  0.206222371  0.206222371  0.206222371  0.206222371
## [206]  0.196222371  0.196222371  0.196222371  0.196222371  0.196222371
## [211]  0.186222371  0.186222371  0.186222371  0.186222371  0.156222371
## [216]  0.156222371  0.156222371  0.146222371  0.136222371  0.136222371
## [221]  0.126222371  0.116222371  0.116222371  0.116222371  0.116222371
## [226]  0.116222371  0.116222371  0.106222371  0.106222371  0.106222371
## [231]  0.106222371  0.106222371  0.096222371  0.086222371  0.086222371
## [236]  0.086222371  0.086222371  0.076222371  0.076222371  0.066222371
## [241]  0.066222371  0.056222371  0.056222371  0.056222371  0.046222371
## [246]  0.046222371  0.046222371  0.026222371  0.026222371  0.026222371
## [251]  0.016222371  0.006222371  0.006222371  0.006222371  0.006222371
## [256] -0.003777629 -0.003777629 -0.003777629 -0.003777629 -0.013777629
## [261] -0.013777629 -0.013777629 -0.023777629 -0.023777629 -0.023777629
## [266] -0.033777629 -0.033777629 -0.033777629 -0.043777629 -0.053777629
## [271] -0.053777629 -0.053777629 -0.053777629 -0.053777629 -0.053777629
```

```
## [276] -0.063777629 -0.063777629 -0.063777629 -0.063777629 -0.073777629
## [281] -0.073777629 -0.073777629 -0.073777629 -0.073777629 -0.073777629
## [286] -0.083777629 -0.083777629 -0.083777629 -0.083777629 -0.083777629
## [291] -0.083777629 -0.093777629 -0.093777629 -0.093777629 -0.093777629
## [296] -0.093777629 -0.093777629 -0.103777629 -0.113777629 -0.113777629
## [301] -0.113777629 -0.113777629 -0.123777629 -0.123777629 -0.123777629
## [306] -0.123777629 -0.123777629 -0.123777629 -0.123777629 -0.123777629
## [311] -0.123777629 -0.123777629 -0.123777629 -0.123777629 -0.133777629
## [316] -0.133777629 -0.133777629 -0.133777629 -0.133777629 -0.133777629
## [321] -0.133777629 -0.133777629 -0.143777629 -0.143777629 -0.143777629
## [326] -0.143777629 -0.143777629 -0.143777629 -0.143777629 -0.153777629
## [331] -0.153777629 -0.153777629 -0.153777629 -0.153777629 -0.153777629
## [336] -0.153777629 -0.153777629 -0.163777629 -0.163777629 -0.163777629
## [341] -0.163777629 -0.173777629 -0.173777629 -0.173777629 -0.173777629
## [346] -0.173777629 -0.183777629 -0.183777629 -0.183777629 -0.183777629
## [351] -0.193777629 -0.193777629 -0.193777629 -0.193777629 -0.193777629
## [356] -0.193777629 -0.193777629 -0.193777629 -0.203777629 -0.203777629
## [361] -0.203777629 -0.203777629 -0.203777629 -0.203777629 -0.203777629
## [366] -0.203777629 -0.203777629 -0.203777629 -0.203777629 -0.213777629
## [371] -0.213777629 -0.213777629 -0.213777629 -0.213777629 -0.213777629
## [376] -0.213777629 -0.213777629 -0.213777629 -0.213777629 -0.223777629
## [381] -0.223777629 -0.223777629 -0.223777629 -0.223777629 -0.223777629
## [386] -0.223777629 -0.223777629 -0.223777629 -0.223777629 -0.223777629
## [391] -0.223777629 -0.223777629 -0.223777629 -0.233777629 -0.233777629
## [396] -0.233777629 -0.233777629 -0.233777629 -0.233777629 -0.233777629
## [401] -0.233777629 -0.233777629 -0.233777629 -0.233777629 -0.233777629
## [406] -0.233777629 -0.233777629 -0.243777629 -0.243777629 -0.243777629
## [411] -0.243777629 -0.243777629 -0.243777629 -0.243777629 -0.243777629
## [416] -0.243777629 -0.253777629 -0.253777629 -0.253777629 -0.253777629
## [421] -0.253777629 -0.253777629 -0.253777629 -0.253777629 -0.253777629
## [426] -0.253777629 -0.253777629 -0.253777629 -0.253777629 -0.253777629
## [431] -0.253777629 -0.253777629 -0.253777629 -0.263777629 -0.263777629
## [436] -0.263777629 -0.263777629 -0.263777629 -0.263777629 -0.263777629
## [441] -0.263777629 -0.263777629 -0.263777629 -0.263777629 -0.263777629
## [446] -0.263777629 -0.263777629 -0.263777629 -0.263777629 -0.263777629
## [451] -0.273777629 -0.273777629 -0.273777629 -0.273777629 -0.273777629
## [456] -0.273777629 -0.273777629 -0.273777629 -0.273777629 -0.273777629
## [461] -0.273777629 -0.273777629 -0.273777629 -0.273777629 -0.273777629
## [466] -0.273777629 -0.273777629 -0.283777629 -0.283777629 -0.283777629
## [471] -0.283777629 -0.283777629 -0.283777629 -0.283777629 -0.283777629
## [476] -0.283777629 -0.283777629 -0.283777629 -0.283777629 -0.283777629
## [481] -0.283777629 -0.293777629 -0.293777629 -0.293777629 -0.293777629
## [486] -0.293777629 -0.293777629 -0.293777629 -0.293777629 -0.293777629
## [491] -0.293777629 -0.293777629 -0.293777629 -0.293777629 -0.293777629
## [496] -0.293777629 -0.293777629 -0.293777629 -0.293777629 -0.293777629
## [501] -0.293777629 -0.293777629 -0.293777629 -0.293777629 -0.293777629
## [506] -0.293777629 -0.293777629 -0.293777629 -0.293777629 -0.303777629
## [511] -0.303777629 -0.303777629 -0.303777629 -0.303777629 -0.303777629
## [516] -0.303777629 -0.303777629 -0.303777629 -0.303777629 -0.303777629
## [521] -0.303777629 -0.303777629 -0.303777629 -0.303777629 -0.303777629
## [526] -0.303777629 -0.303777629 -0.303777629 -0.303777629 -0.303777629
## [531] -0.303777629 -0.303777629 -0.303777629 -0.303777629 -0.303777629
## [536] -0.303777629 -0.313777629 -0.313777629 -0.313777629 -0.313777629
## [541] -0.313777629 -0.313777629 -0.313777629 -0.313777629 -0.313777629
## [546] -0.313777629 -0.313777629 -0.313777629 -0.313777629 -0.313777629
## [551] -0.313777629 -0.313777629 -0.313777629 -0.313777629 -0.313777629
```
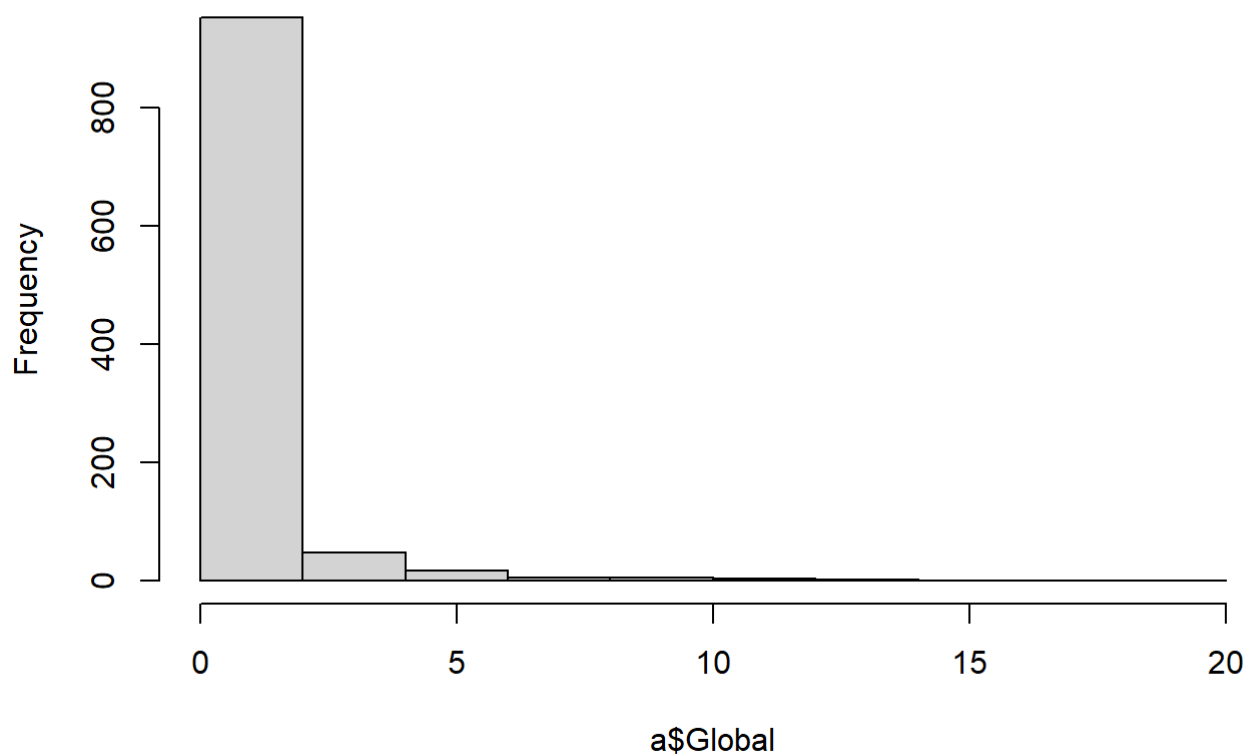
```
## [556] -0.313777629 -0.313777629 -0.313777629 -0.313777629 -0.313777629
## [561] -0.313777629 -0.313777629 -0.323777629 -0.323777629 -0.323777629
## [566] -0.323777629 -0.323777629 -0.323777629 -0.323777629 -0.323777629
## [571] -0.323777629 -0.323777629 -0.323777629 -0.323777629 -0.323777629
## [576] -0.323777629 -0.323777629 -0.323777629 -0.323777629 -0.323777629
## [581] -0.323777629 -0.323777629 -0.323777629 -0.323777629 -0.323777629
## [586] -0.323777629 -0.323777629 -0.323777629 -0.323777629 -0.323777629
## [591] -0.323777629 -0.323777629 -0.323777629 -0.323777629 -0.323777629
## [596] -0.323777629 -0.323777629 -0.323777629 -0.323777629 -0.323777629
## [601] -0.322777629 -0.333777629 -0.333777629 -0.333777629 -0.333777629
## [606] -0.333777629 -0.333777629 -0.333777629 -0.333777629 -0.333777629
## [611] -0.333777629 -0.333777629 -0.333777629 -0.333777629 -0.333777629
## [616] -0.333777629 -0.333777629 -0.333777629 -0.333777629 -0.333777629
## [621] -0.333777629 -0.333777629 -0.333777629 -0.333777629 -0.333777629
## [626] -0.333777629 -0.333777629 -0.333777629 -0.333777629 -0.333777629
## [631] -0.333777629 -0.333777629 -0.333777629 -0.333777629 -0.333777629
## [636] -0.333777629 -0.333777629 -0.333777629 -0.333777629 -0.343777629
## [641] -0.343777629 -0.343777629 -0.343777629 -0.343777629 -0.343777629
## [646] -0.343777629 -0.343777629 -0.343777629 -0.343777629 -0.343777629
## [651] -0.343777629 -0.343777629 -0.343777629 -0.343777629 -0.343777629
## [656] -0.343777629 -0.343777629 -0.343777629 -0.343777629 -0.343777629
## [661] -0.343777629 -0.343777629 -0.343777629 -0.343777629 -0.343777629
## [666] -0.343777629 -0.343777629 -0.343777629 -0.343777629 -0.343777629
## [671] -0.343777629 -0.343777629 -0.343777629 -0.343777629 -0.343777629
## [676] -0.343777629 -0.343777629 -0.343777629 -0.353777629 -0.353777629
## [681] -0.353777629 -0.353777629 -0.353777629 -0.353777629 -0.353777629
## [686] -0.353777629 -0.353777629 -0.353777629 -0.353777629 -0.353777629
## [691] -0.353777629 -0.353777629 -0.353777629 -0.353777629 -0.353777629
## [696] -0.353777629 -0.353777629 -0.353777629 -0.353777629 -0.353777629
## [701] -0.353777629 -0.353777629 -0.353777629 -0.353777629 -0.353777629
## [706] -0.353777629 -0.353777629 -0.353777629 -0.353777629 -0.353777629
## [711] -0.353777629 -0.353777629 -0.363777629 -0.363777629 -0.363777629
## [716] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [721] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [726] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [731] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [736] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [741] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [746] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [751] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [756] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [761] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [766] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [771] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [776] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [781] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [786] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [791] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [796] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [801] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [806] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [811] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [816] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [821] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [826] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [831] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
```

```
##  [836] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [841] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [846] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [851] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [856] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [861] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [866] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [871] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [876] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [881] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [886] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [891] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [896] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [901] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [906] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [911] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [916] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [921] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [926] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [931] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [936] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [941] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [946] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [951] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [956] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [961] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [966] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [971] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [976] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [981] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [986] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [991] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
##  [996] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [1001] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [1006] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [1011] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [1016] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [1021] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [1026] -0.363777629 -0.363777629 -0.363777629 -0.363777629 -0.363777629
## [1031] -0.363777629 -0.363777629 -0.363777629 -0.363777629
```

#part 5-plotting the one variables

```
hist(a$Global,main="HISTOGRAM OF GLOBAL")
```

HISTOGRAM OF GLOBAL

#part6-scatterplot

```
plot(a$Global,a$Rest.of.World,main="scatterplot")
```

scatterplot