Analysing 120 Years Olympics Dataset Olympic games are an event where athletes from all over the world participate to compete with each other. In this paper, I have tried to study the data of Olympic games from the year 1896 – 2016. **Empty Records** -- Checking count of empty records in important columns SELECT count(id) AS total_participants_records, SUM(CASE WHEN sex IS NULL THEN 1 ELSE 0 END) AS unspecified_gender, SUM(CASE WHEN age IS NULL THEN 1 ELSE 0 END) AS unspecified_age, CASE WHEN height IS NULL THEN 1 ELSE 0 END) AS unspecified_height, SUM(CASE WHEN weight IS NULL THEN 1 ELSE 0 END) AS unspecified_weight FROM gondal.athlete_events Records with Missing values unspecified_age total_participants_records unspecified_gender unspecified_height unspecified_weight 271116 0 9474 60171 62875 Showing rows 1-1 of 1 Page 1 of 1 > >> **Exploring Event Records** SELECT id, name, sex, age, height, weight, team, games, year, season, city, sport, event, region, medal FROM Combined Both Tables ▼ name id height weight sex age team games year season 80 China 1 A Dijiang M 24 180 1992 Summer 1992 Summer 2 A Lamusi M 23 170 60 China 2012 Summer 2012 Summer Denmark 3 Gunnar Nielsen Aaby 24 1920 Summer 1920 Summer 4 Edgar Lindenau Aab... 34 Denmark/Sweden 1900 Summer Summer 21 185 5 Christine Jacoba Aaf... 82 Netherlands 1988 Winter 1988 Winter 21 185 82 Netherlands 5 Christine Jacoba Aaf... 1988 Winter 1988 Winter 25 185 5 Christine Jacoba Aaf... 82 Netherlands 1992 Winter 1992 Winter 25 5 Christine Jacoba Aaf... 185 Netherlands 1992 Winter 1992 Winter 5 Christine Jacoba Aaf... 27 185 82 Netherlands 1994 Winter 1994 Winter 27 82 Netherlands 5 Christine Jacoba Aaf... F 185 1994 Winter Showing rows 1-10 of 10 of 1 > >> Page 1 **Country wise participation** SELECT RANK() OVER (ORDER BY count(ID) DESC) AS country_rank, region, COUNT(ID) AS total_participants FROM SELECT id, name, sex, age, height, weight, team, Top 10 Country wise participation of athletes total_participants 20,000 18,853 15,883 16,000 12,758 12,256 11,692 12,000 10,715 9,734 8,444 8,339 7,724 8,000 4,000 0 USA UK Italy Australia Germany France Russia Canada Japan Sweden Top 10 Country wise participation of athletes ▼ region total_participants country_rank 1 USA 18853 15883 2 Germany 3 France 12758 4 UK 12256 5 Russia 11692 10715 6 Italy 7 Canada 9734 8 Japan 8444 9 Sweden 8339 7724 10 Australia of 1 > >> Showing rows 1-10 of 10 Page 1 Gender Distribution of Male and Female athletes SELECT COUNT(ID) AS participants FROM SELECT id, name, sex, age, height, weight, team, games, year, season, city Gender Distribution of Male and Female athletes 27.47% 72.53% Gender Distribution of Male and Female athletes participants sex 74393 196374 Showing rows 1-2 of 2 of 1 > >> Page 1 Increase in participation of both genders over the time SELECT year, SUM(WHEN sex = 'F' THEN 1 ELSE 0 END) AS Females, SUM(WHEN sex = 'M' THEN 1) AS Males FROM SELECT Increase in Participation of Both Genders over time No Measure Value 12,000 8,000 4,000 6,000 4,000 2,000 1,890 1,980 1,910 1,920 1,930 1,940 1,950 1,970 2,000 2,010 2,020 1,900 1,960 1,990 year Increase in Participation of Both Genders over time year females 0 1896 380 1900 33 1903 1904 16 1285 1906 11 1722 47 1908 3054 1912 87 3953 1920 134 4158 1924 261 5432 1928 437 5137 1932 369 2952 1936 549 6852 of 1 > >> Page 1 Showing rows 1-35 of 35 Female participants in both Seasons SELECT year, SUM(CASE WHEN sex = 'F' THEN 1 ELSE 0 END) AS participants FROM SELECT id, name, sex, height, weight, team, games, year, season Overall Female Participation in Both Seasons SummerWinter 20.27% Count of Female participants in both Seasons year season participants 0 1896 Summer 1900 Summer 33 1904 Summer 16 11 1906 Summer 1908 Summer 47 87 1912 Summer 134 1920 Summer 1924 Summer 244 17 1924 Winter 1928 Summer 404 1928 Winter 33 of 1 > >> Showing rows 1-51 of 51 Page 1 Count of Female participants in Summer Olympics participants 6,203 5,793 5,791 6,000 5,418 5,531 4,998 5,000 3,542 3,000 2,447 2,190 2,000 1,495 1,435 1,000 33 1,890 1,900 1,910 1,920 1,930 1,940 1,950 1,960 1,970 1,980 1,990 2,000 2,010 2,020 Year **Count of Female participants in Winter Olympics** participants 2,023 2,000 1,847 1,757 1,600 1,582 Participants count 1,384 1,200 1,054 800 680 434 416 400 404 295 246 33 1,920 1,930 1,940 1,960 1,980 1,990 2,000 2,010 2,020 1,950 1,970 Year **Top 10 Countries to win Medals** WITH medals_country AS (SELECT id, name, age, height, weight, team, games, season, city, sport, event, region, Top 10 Countries to win Medals 5,637 total_participants 5,500 total_medals_won 18,000 5,000 16,000 4,500 14,000 3,947 4,000 Total Participants 3,756 -3,500 Medals Wo -3,000 Wo -2,500 on 12,000 10,000 8,000 2,068 2,000 6,000 1,536 1,637 1,777 1,500 1,349-4,000 1,352 1,000 1,135 2,000 500 0 Hungary Australia Sweden Canada Italy Russia UK France Germany USA Region ▼ region total_participants 🔻 total_medals_won 🔻 gold_medals silver_medals bronze_medals average_height 🔻 country_rank average_weight 🔻 1641 1358 180 75 1 USA 18853 2638 5637 2 Russia 11692 3947 1599 1170 1178 177 74 3 Germany 15883 3756 1301 1195 1260 179 74 12256 678 651 179 75 2068 739 5 France 12758 1777 501 610 666 179 74 6 Italy 10715 1637 575 531 531 178 76 7 Sweden 8339 1536 479 522 535 180 76 9734 463 451 176 74 8 Canada 1352 438 9 Australia 7724 1349 368 459 522 179 74 6607 432 332 371 179 10 Hungary 1135 76 of 1 > >> Showing rows 1-10 of 10 Page 1 Winner count - both Genders WITH medals_gender AS (SELECT name, age, height, weight, team, games, year, season, city, sport, event, region, medal Participants vs Winners - Both Genders bronze_medals 3,767 3,747 3,732 gold_medals silver_medals total_medals_won 11,246 74,393 total_participants Sex 9,524 9,624 9,380 28,528 196,374 0 20,000 40,000 60,000 80,000 100,000 120,000 140,000 160,000 180,000 200,000 220,000 Participant count Participants vs Winners - Both Genders total_medals_won silver_medals bronze_medals total_participants gold_medals sex F 74393 3747 3732 3767 11246 Μ 196374 28528 9624 9380 9524 Showing rows 1-2 of 2 Page 1 of 1 **Height vs Weight of winners** Height vs Weight of Winners Sex 200 180 M 160 140 120 Weight 100 80 60 40 20 0 130 140 150 160 170 180 190 200 210 220 230 Height Average Physical stats of both genders (kg and cm) Average physical stats of both genders (winners) average_height average_weight 170 63 181 79 20 80 100 140 160 180 200 220 120 Measure Values Average physical stats of both genders (winners) average_weight ▼ average_age average_height sex 170 63 25 181 79 26 Showing rows 1-2 of 2 of 1 >>>> Page 1 Female participants - winners vs non-winners stats Females: Winners vs Non-winners stats average_height average_weight medal medal_count average_age 3747 171 63 Gold 24 3732 171 63 24 Silver Bronze 3767 170 63 25 NA 167 59 24 of 1 > >> Showing rows 1-4 of 4 Page 1 Male participants - winners vs non-winners stats

Males: Winners vs Non-winners stats

of 1 > >>

9624

9380

9524

0

181

181

181

178

80

79

79

75

27

27

26

26

Showing rows 1-4 of 4

Gold

Silver Bronze

NA

Page 1

Report run on Sep 24, 2023 at 1:08 PM UTC