

Q1

```
RESTART C:\Users\12103\Desktop\CS677 HW\HW1\Homework_1\Homework_1\Wellin Lu Assign 1.py
['work_year', 'experience_level', 'employment_type', 'job_title', 'salary', 'salary_currency', 'employee_residence', 'remote_ratio', 'company_location', 'company_size']
[0, '2020', 'ML', 'FT', 'Data Scientist', '70000', 'EUR', '78933', 'DE', '0', 'DE', 'L']
[1, '2020', 'SE', 'FT', 'Machine Learning Manager', '187000', 'USD', '260000', 'JP', '0', 'JP', 'S']
[2, '2020', 'SE', 'FT', 'Big Data Engineer', '85000', 'GBP', '109024', 'GB', '50', 'GB', 'M']
[3, '2020', 'ML', 'FT', 'Product Data Analyst', '20000', 'USD', '20000', 'HN', '0', 'HN', 'S']
[4, '2020', 'SE', 'FT', 'Machine Learning Engineer', '150000', 'USD', '150000', 'US', '50', 'US', 'L']
[5, '2020', 'EN', 'FT', 'Data Analyst', '72000', 'USD', '72000', 'US', '100', 'US', 'L']
[6, '2020', 'SE', 'FT', 'Lead Data Scientist', '190000', 'USD', '190000', 'US', '100', 'US', 'S']
[7, '2020', 'ML', 'FT', 'Data Scientist', '1000000', 'EUR', '35735', 'HU', '50', 'HU', 'L']
[8, '2020', 'ML', 'FT', 'Business Data Analyst', '135000', 'USD', '135000', 'US', '100', 'US', 'L']
[9, '2020', 'SE', 'FT', 'Lead Data Engineer', '125000', 'USD', '125000', 'NZ', '50', 'NZ', 'S']
[10, '2020', 'EN', 'FT', 'Data Scientist', '45000', 'EUR', '51321', 'FR', '0', 'FR', 'S']
[11, '2020', 'ML', 'FT', 'Data Scientist', '3000000', 'INR', '40481', 'IN', '0', 'IN', 'L']
[12, '2020', 'EN', 'FT', 'Data Scientist', '35000', 'EUR', '39916', 'FR', '0', 'FR', 'M']
[13, '2020', 'ML', 'FT', 'Lead Data Analyst', '87000', 'USD', '87000', 'US', '100', 'US', 'L']
[14, '2020', 'ML', 'FT', 'Data Analyst', '8500', 'USD', '8500', 'US', '100', 'US', 'L']
[15, '2020', 'ML', 'FT', 'Data Analyst', '8000', 'USD', '8000', 'FR', '50', 'FR', 'L']
[16, '2020', 'SE', 'FT', 'Data Engineer', '445000', 'TRY', '41689', 'TR', '100', 'TR', 'S']
[17, '2020', 'SE', 'FT', 'Big Data Engineer', '100000', 'EUR', '114047', 'PL', '100', 'GB', 'S']
[18, '2020', 'EN', 'FT', 'Data Science Consultant', '423000', 'INR', '5707', 'IN', '50', 'IN', 'M']
[19, '2020', 'ML', 'FT', 'Lead Data Engineer', '56000', 'USD', '56000', 'FI', '100', 'US', 'M']
[20, '2020', 'ML', 'FT', 'Machine Learning Engineer', '299000', 'CNY', '4331', 'CN', '0', 'CN', 'M']
[21, '2020', 'ML', 'FT', 'Product Data Analyst', '450000', 'INR', '6072', 'IN', '100', 'IN', 'L']
[22, '2020', 'SE', 'FT', 'Data Engineer', '42000', 'EUR', '47899', 'GR', '50', 'GR', 'S']
[23, '2020', 'ML', 'FT', 'BI Data Analyst', '99000', 'USD', '99000', 'US', '0', 'US', 'M']
[24, '2020', 'ML', 'FT', 'Lead Data Scientist', '115000', 'USD', '115000', 'AE', '0', 'AE', 'L']
[25, '2020', 'EX', 'FT', 'Director of Data Science', '325000', 'USD', '325000', 'US', '100', 'US', 'L']
[26, '2020', 'EN', 'FT', 'Research Scientist', '42000', 'USD', '42000', 'NL', '50', 'NL', 'L']
[27, '2020', 'SE', 'FT', 'Data Engineer', '720000', 'MXN', '33511', 'MX', '0', 'MX', 'S']
[28, '2020', 'EN', 'CT', 'Business Data Analyst', '100000', 'USD', '100000', 'US', '100', 'US', 'L']
[29, '2020', 'EN', 'FT', 'Machine Learning Manager', '187000', 'CAD', '117104', 'CA', '50', 'CA', 'L']
[30, '2020', 'ML', 'FT', 'Data Engineering Manager', '51999', 'EUR', '69303', 'DE', '100', 'DE', 'S']
[31, '2020', 'EN', 'FT', 'Big Data Engineer', '70000', 'USD', '70000', 'US', '100', 'US', 'S']
[32, '2020', 'SE', 'FT', 'Data Scientist', '60000', 'EUR', '68428', 'GR', '100', 'US', 'L']
[33, '2020', 'ML', 'FT', 'Research Scientist', '450000', 'USD', '450000', 'US', '0', 'US', 'M']
[34, '2020', 'ML', 'FT', 'Data Analyst', '41000', 'EUR', '46759', 'FR', '50', 'FR', 'L']
[35, '2020', 'ML', 'FT', 'Data Engineer', '65000', 'EUR', '74193', 'AT', '50', 'AT', 'L']
[36, '2020', 'ML', 'FT', 'Data Science Consultant', '103000', 'USD', '103000', 'US', '100', 'US', 'L']
[37, '2020', 'EN', 'FT', 'Machine Learning Engineer', '250000', 'USD', '250000', 'US', '50', 'US', 'S']
[38, '2020', 'EN', 'FT', 'Data Analyst', '10000', 'USD', '10000', 'MX', '100', 'US', 'L']
[39, '2020', 'EN', 'FT', 'Machine Learning Engineer', '138000', 'USD', '138000', 'US', '100', 'US', 'S']
[40, '2020', 'ML', 'FT', 'Data Scientist', '45760', 'USD', '45760', 'PH', '100', 'US', 'L']
[41, '2020', 'EX', 'FT', 'Data Engineering Manager', '70000', 'EUR', '79833', 'ES', '50', 'ES', 'L']
[42, '2020', 'ML', 'FT', 'Machine Learning Infrastructure Engineer', '44000', 'EUR', '50180', 'PT', '0', 'PT', 'M']
[43, '2020', 'ML', 'FT', 'Data Engineer', '106000', 'USD', '106000', 'US', '100', 'US', 'L']
[44, '2020', 'EN', 'FT', 'Data Engineer', '80000', 'GBP', '112072', 'GB', '50', 'GB', 'L']
[45, '2020', 'EN', 'PT', 'ML Engineer', '14000', 'EUR', '15966', 'DE', '100', 'DE', 'S']
[46, '2020', 'ML', 'FT', 'Data Scientist', '60000', 'GBP', '76958', 'GB', '100', 'GB', 'S']
[47, '2020', 'SE', 'FT', 'Data Engineer', '188000', 'USD', '188000', 'US', '100', 'US', 'L']
[48, '2020', 'ML', 'FT', 'Data Scientist', '105000', 'USD', '105000', 'US', '100', 'US', 'L']
[49, '2020', 'ML', 'FT', 'Data Engineer', '61500', 'EUR', '70139', 'FR', '50', 'FR', 'L']
[50, '2020', 'EN', 'FT', 'Data Analyst', '450000', 'INR', '6072', 'IN', '0', 'IN', 'S']
[51, '2020', 'EN', 'FT', 'Data Analyst', '91000', 'USD', '91000', 'US', '100', 'US', 'L']
[52, '2020', 'EN', 'FT', 'AI Scientist', '300000', 'DKK', '45896', 'DK', '50', 'DK', 'S']
[53, '2020', 'EN', 'FT', 'Data Engineer', '48000', 'EUR', '54742', 'FR', '100', 'DE', 'L']
[54, '2020', 'SE', 'FL', 'Computer Vision Engineer', '60000', 'USD', '60000', 'RU', '100', 'US', 'S']
[55, '2020', 'SE', 'FT', 'Principal Data Scientist', '130000', 'EUR', '148261', 'DE', '100', 'DE', 'M']
[56, '2020', 'EN', 'FT', 'Data Scientist', '240000', 'EUR', '28776', 'ES', '100', 'US', 'L']
[57, '2020', 'ML', 'FT', 'Data Scientist', '118000', 'USD', '118000', 'US', '100', 'US', 'M']
[58, '2020', 'SE', 'FT', 'Data Scientist', '120000', 'USD', '120000', 'US', '50', 'US', 'L']
[59, '2020', 'ML', 'FT', 'Data Scientist', '138350', 'USD', '138350', 'US', '100', 'US', 'M']
[60, '2020', 'ML', 'FT', 'Data Engineer', '110000', 'USD', '110000', 'US', '100', 'US', 'L']
[61, '2020', 'ML', 'FT', 'Data Engineer', '130800', 'USD', '130800', 'ES', '100', 'US', 'M']
[62, '2020', 'EN', 'FT', 'Data Scientist', '19000', 'EUR', '21669', 'FR', '50', 'IT', 'S']
[63, '2020', 'SE', 'FT', 'Data Scientist', '412000', 'USD', '412000', 'US', '100', 'US', 'L']
[64, '2020', 'SE', 'FT', 'Machine Learning Engineer', '40000', 'EUR', '45618', 'HR', '100', 'HR', 'S']
[65, '2020', 'EN', 'FT', 'Data Scientist', '55000', 'EUR', '62726', 'DE', '50', 'DE', 'S']
[66, '2020', 'EN', 'FT', 'Data Scientist', '43200', 'EUR', '49268', 'DE', '0', 'DE', 'S']
[67, '2020', 'SE', 'FT', 'Data Science Manager', '190200', 'USD', '190200', 'US', '100', 'US', 'M']
[68, '2020', 'EN', 'FT', 'Data Scientist', '105000', 'USD', '105000', 'US', '100', 'US', 'S']
[69, '2020', 'SE', 'FT', 'Data Scientist', '80000', 'EUR', '91237', 'AT', '0', 'AT', 'S']
[70, '2020', 'ML', 'FT', 'Data Scientist', '55000', 'EUR', '62726', 'FR', '50', 'LU', 'S']
[71, '2020', 'ML', 'FT', 'Data Scientist', '37000', 'EUR', '42197', 'FR', '50', 'FR', 'L']
[72, '2021', 'EN', 'FT', 'Research Scientist', '60000', 'GBP', '82528', 'GB', '50', 'GB', 'L']
[73, '2021', 'EX', 'FT', 'BI Data Analyst', '150000', 'USD', '150000', 'IN', '100', 'US', 'L']
[74, '2021', 'ML', 'FT', 'Head of Data', '235000', 'USD', '235000', 'US', '100', 'US', 'L']
[75, '2021', 'SE', 'FT', 'Data Scientist', '45000', 'EUR', '53192', 'FR', '50', 'FR', 'L']
[76, '2021', 'ML', 'FT', 'BI Data Analyst', '100000', 'USD', '100000', 'US', '100', 'US', 'M']
[77, '2021', 'ML', 'FT', '3D Computer Vision Researcher', '400000', 'INR', '5408', 'IN', '50', 'IN', 'M']
[78, '2021', 'ML', 'CT', 'ML Engineer', '270000', 'USD', '270000', 'US', '100', 'US', 'L']
[79, '2021', 'EN', 'FT', 'Data Analyst', '80000', 'USD', '80000', 'US', '100', 'US', 'M']
[80, '2021', 'SE', 'FT', 'Data Analytics Engineer', '67000', 'EUR', '79197', 'DE', '100', 'DE', 'L']
[81, '2021', 'EN', 'FT', 'Data Engineer', '140000', 'USD', '140000', 'US', '100', 'US', 'L']
[82, '2021', 'ML', 'FT', 'Applied Data Scientist', '68000', 'CAD', '54238', 'GB', '50', 'CA', 'L']
[83, '2021', 'ML', 'FT', 'Machine Learning Engineer', '40000', 'EUR', '47282', 'ES', '100', 'ES', 'S']
[84, '2021', 'EX', 'FT', 'Director of Data Science', '130000', 'EUR', '153667', 'IT', '100', 'PL', 'L']
[85, '2021', 'ML', 'FT', 'Data Engineer', '110000', 'PLN', '28476', 'PL', '100', 'PL', 'L']
[86, '2021', 'EN', 'FT', 'Data Analyst', '60000', 'EUR', '59102', 'FR', '50', 'FR', 'M']
[87, '2021', 'ML', 'FT', 'Data Analytics Engineer', '110000', 'USD', '110000', 'US', '100', 'US', 'L']
[88, '2021', 'SE', 'FT', 'Lead Data Analyst', '170000', 'USD', '170000', 'US', '100', 'US', 'L']
[89, '2021', 'SE', 'FT', 'Data Analyst', '80000', 'USD', '80000', 'BG', '100', 'US', 'S']
[90, '2021', 'SE', 'FT', 'Marketing Data Analyst', '75000', 'EUR', '88654', 'GR', '100', 'DK', 'L']
[91, '2021', 'EN', 'FT', 'Data Science Consultant', '65000', 'EUR', '76833', 'DE', '100', 'DE', 'S']
[92, '2021', 'ML', 'FT', 'Lead Data Analyst', '1450000', 'INR', '19609', 'IN', '100', 'IN', 'L']
[93, '2021', 'SE', 'FT', 'Lead Data Engineer', '276000', 'USD', '276000', 'US', '0', 'US', 'L']
[94, '2021', 'EN', 'FT', 'Data Scientist', '2200000', 'INR', '29751', 'IN', '50', 'IN', 'L']
[95, '2021', 'ML', 'FT', 'Cloud Data Engineer', '120000', 'SGD', '89294', 'SG', '50', 'SG', 'L']
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Q2

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2020Average Salary is : 95813.0
2021Average Salary is : 99853.79262672811
2022Average Salary is : 124522.00628930818
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Q3

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.....
2022 has highest salary, 2020 lowest
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Q4

The Average salary of SE Research Scientist: 88859.4  
The Average salary of SE Principal Data Scientist: 187939.4  
The Average salary of SE Principal Data Engineer: 192500.0  
The Average salary of SE Principal Data Analyst: 170000.0  
The Average salary of SE ML Engineer: 256000.0  
The Average salary of SE Marketing Data Analyst: 88654.0  
The Average salary of SE Machine Learning Scientist: 105000.0  
The Average salary of SE Machine Learning Manager: 117104.0  
The Average salary of SE Machine Learning Infrastructure Engineer: 195000.0  
The Average salary of SE Machine Learning Engineer: 131176.0  
The Average salary of SE Lead Machine Learning Engineer: 87932.0  
The Average salary of SE Lead Data Scientist: 115285.0  
The Average salary of SE Lead Data Engineer: 166040.0  
The Average salary of SE Head of Data: 151419.5  
The Average salary of SE Finance Data Analyst: 61896.0  
The Average salary of SE Director of Data Science: 168000.0  
The Average salary of SE Director of Data Engineering: 156738.0  
The Average salary of SE Data Specialist: 165000.0  
The Average salary of SE Data Scientist: 152971.0163934426  
The Average salary of SE Data Science Manager: 149994.2  
The Average salary of SE Data Engineering Manager: 159000.0  
The Average salary of SE Data engineering: 137035.84126984127  
The Average salary of SE Data Architect: 182076.625  
The Average salary of SE Data Analytics Manager: 127134.28571428571  
The Average salary of SE Data Analytics Lead: 405000.0  
The Average salary of SE Data Analytics Engineer: 64598.5  
The Average salary of SE Data Analyst: 111922.62962962964  
The Average salary of SE Computer Vision Engineer: 34302.333333333336  
The Average salary of SE Cloud Data Engineer: 160000.0  
The Average salary of SE Big Data Engineer: 111535.5  
The Average salary of SE Big Data Architect: 99703.0  
The Average salary of SE Applied Data Scientist: 278500.0  
The Average salary of SE Analytics Engineer: 195000.0  
The Average salary of SE AI Scientist: 55000.0  
#####  
The Average salary of MI Research Scientist: 136498.14285714287  
The Average salary of MI Product Data Analyst: 13036.0  
The Average salary of MI Principal Data Scientist: 151000.0  
The Average salary of MI Principal Data Analyst: 75000.0  
The Average salary of MI NLP Engineer: 37236.0  
The Average salary of MI ML Engineer: 137025.0  
The Average salary of MI Machine Learning Scientist: 109325.0  
The Average salary of MI Machine Learning Infrastructure Engineer: 54217.5  
The Average salary of MI Machine Learning Engineer: 74466.58333333333  
The Average salary of MI Machine Learning Developer: 78791.0  
The Average salary of MI Lead Data Scientist: 115000.0  
The Average salary of MI Lead Data Engineer: 56000.0  
The Average salary of MI Lead Data Analyst: 53304.5  
The Average salary of MI Head of Data Science: 110000.0  
The Average salary of MI Head of Data: 32974.0  
The Average salary of MI Financial Data Analyst: 450000.0  
The Average salary of MI ETL Developer: 54957.0  
The Average salary of MI Data Scientist: 82039.13333333333  
The Average salary of MI Data Science Manager: 200000.0  
The Average salary of MI Data Science Engineer: 40189.0  
The Average salary of MI Data Science Engineer: 40189.0  
The Average salary of MI Data Science Consultant: 103000.0  
The Average salary of MI Data Engineering Manager: 59303.0  
The Average salary of MI Data Engineer: 85985.6603773585  
The Average salary of MI Data Architect: 166666.66666666666  
The Average salary of MI Data Analytics Engineer: 110000.0  
The Average salary of MI Data Analyst: 71699.20689655172  
The Average salary of MI Computer Vision Software Engineer: 95746.0  
The Average salary of MI Cloud Data Engineer: 89294.0  
The Average salary of MI Business Data Analyst: 74784.66666666667  
The Average salary of MI Big Data Engineer: 33537.0  
The Average salary of MI BI Data Analyst: 78086.33333333333  
The Average salary of MI Applied Machine Learning Scientist: 178800.0  
The Average salary of MI Applied Data Scientist: 105619.0  
The Average salary of MI AI Scientist: 160000.0  
The Average salary of MI 3D Computer Vision Researcher: 5409.0  
#####  
The Average salary of EX Principal Data Scientist: 416000.0  
The Average salary of EX Principal Data Engineer: 600000.0  
The Average salary of EX Lead Data Engineer: 118187.0  
The Average salary of EX Head of Machine Learning: 79039.0  
The Average salary of EX Head of Data Science: 158958.33333333334  
The Average salary of EX Head of Data: 232500.0  
The Average salary of EX Director of Data Science: 199586.33333333334  
The Average salary of EX Data Science Consultant: 69741.0  
The Average salary of EX Data Engineering Manager: 79833.0  
The Average salary of EX BI Data Analyst: 150000.0  
The Average salary of EX Analytics Engineer: 155000.0  
#####  
The Average salary of EN Research Scientist: 86132.0  
The Average salary of EN ML Engineer: 18974.5  
The Average salary of EN Machine Learning Scientist: 225000.0  
The Average salary of EN Machine Learning Engineer: 86996.33333333333  
The Average salary of EN Machine Learning Developer: 100000.0  
The Average salary of EN Financial Data Analyst: 100000.0  
The Average salary of EN Data Scientist: 55330.90909090909  
The Average salary of EN Data Science Consultant: 62640.8  
The Average salary of EN Data Engineer: 58933.5  
The Average salary of EN Data Analytics Engineer: 20000.0  
The Average salary of EN Data Analyst: 53960.66666666666  
The Average salary of EN Computer Vision Software Engineer: 110000.0  
The Average salary of EN Computer Vision Engineer: 54536.333333333336  
The Average salary of EN Business Data Analyst: 79551.0  
The Average salary of EN Big Data Engineer: 30703.333333333332  
The Average salary of EN BI Data Analyst: 32136.0  
The Average salary of EN Applied Machine Learning Scientist: 31875.0  
The Average salary of EN Applied Data Scientist: 110037.0



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The Average salary of EN Research Scientist: 86132.0
The Average salary of EN ML Engineer: 18974.5
The Average salary of EN Machine Learning Scientist: 225000.0
The Average salary of EN Machine Learning Engineer: 86996.33333333333
The Average salary of EN Machine Learning Developer: 100000.0
The Average salary of EN Financial Data Analyst: 100000.0
The Average salary of EN Data Scientist: 55330.90909090909
The Average salary of EN Data Science Consultant: 62640.8
The Average salary of EN Data Engineer: 58933.5
The Average salary of EN Data Analytics Engineer: 20000.0
The Average salary of EN Data Analyst: 53960.666666666664
The Average salary of EN Computer Vision Software Engineer: 110000.0
The Average salary of EN Computer Vision Engineer: 54536.333333333336
The Average salary of EN Business Data Analyst: 79551.0
The Average salary of EN Big Data Engineer: 30703.333333333332
The Average salary of EN BI Data Analyst: 32136.0
The Average salary of EN Applied Machine Learning Scientist: 31875.0
The Average salary of EN Applied Data Scientist: 110037.0
The Average salary of EN AI Scientist: 21987.25
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Q5

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Min Salary of 3D Computer Vision Researcher is 5409.0
Max Salary of 3D Computer Vision Researcher is 5409.0
Min salary of AI Scientist is 12000.0
Max salary of AI Scientist is 200000.0
Min salary of Analytics Engineer is 135000.0
Max salary of Analytics Engineer is 205300.0
Min salary of Applied Data Scientist is 54238.0
Max salary of Applied Data Scientist is 380000.0
Min salary of Applied Machine Learning Scientist is 31875.0
Max salary of Applied Machine Learning Scientist is 423000.0
Min salary of Applied Machine Learning Scientist is 9272.0
Max salary of Applied Machine Learning Scientist is 150000.0
Min salary of Big Data Architect is 99703.0
Max salary of Big Data Architect is 99703.0
Min salary of Big Data Engineer is 5882.0
Max salary of Big Data Engineer is 114047.0
Min salary of Business Data Analyst is 18442.0
Max salary of Business Data Analyst is 135000.0
Min salary of Cloud Data Engineer is 89294.0
Max salary of Cloud Data Engineer is 160000.0
Min salary of Computer Vision Engineer is 10000.0
Max salary of Computer Vision Engineer is 125000.0
Min salary of Computer Vision Software Engineer is 70000.0
Max salary of Computer Vision Software Engineer is 150000.0
Min salary of Data Analyst is 6072.0
Max salary of Data Analyst is 200000.0
Min salary of Data Analytics Engineer is 20000.0
Max salary of Data Analytics Engineer is 110000.0
Min salary of Data Analytics Lead is 405000.0
Max salary of Data Analytics Lead is 405000.0
Min salary of Data Analytics Manager is 105400.0
Max salary of Data Analytics Manager is 150260.0
Min salary of Data Architect is 90700.0
Max salary of Data Architect is 266400.0
Min salary of Data Engineer is 4000.0
Max salary of Data Engineer is 324000.0
Min salary of Data Engineering Manager is 59303.0
Max salary of Data Engineering Manager is 174000.0
Min salary of Data Science Consultant is 5707.0
Max salary of Data Science Consultant is 103000.0
Min salary of Data Science Engineer is 40189.0
Max salary of Data Science Engineer is 127221.0
Min salary of Data Science Manager is 54094.0
Max salary of Data Science Manager is 241000.0
Min salary of Data Scientist is 2859.0
Max salary of Data Scientist is 412000.0
Min salary of Data Specialist is 165000.0
Max salary of Data Specialist is 165000.0
Min salary of Director of Data Engineering is 113476.0
Max salary of Director of Data Engineering is 200000.0
Min salary of Director of Data Science is 130026.0
Max salary of Director of Data Science is 325000.0
Min salary of ETL Developer is 54957.0
Max salary of ETL Developer is 54957.0
Min salary of Finance Data Analyst is 61896.0
Max salary of Finance Data Analyst is 61896.0
Min salary of Financial Data Analyst is 100000.0
Max salary of Financial Data Analyst is 450000.0
Min salary of Head of Data is 32974.0
Max salary of Head of Data is 235000.0
Min salary of Head of Data Science is 85000.0
Max salary of Head of Data Science is 224000.0
Min salary of Head of Machine Learning is 79039.0
Max salary of Head of Machine Learning is 79039.0
Min salary of Lead Data Analyst is 19609.0
Max salary of Lead Data Analyst is 170000.0
Min salary of Lead Data Engineer is 56000.0
Max salary of Lead Data Engineer is 276000.0
Min salary of Lead Data Scientist is 40570.0
Max salary of Lead Data Scientist is 190000.0
Min salary of Lead Machine Learning Engineer is 87932.0
Max salary of Lead Machine Learning Engineer is 87932.0
Min salary of Machine Learning Developer is 78791.0
Max salary of Machine Learning Developer is 100000.0
Min salary of Machine Learning Engineer is 20000.0
Max salary of Machine Learning Engineer is 250000.0
Min salary of Machine Learning Infrastructure Engineer is 50180.0
Max salary of Machine Learning Infrastructure Engineer is 195000.0
Min salary of Machine Learning Manager is 117104.0
Max salary of Machine Learning Manager is 117104.0
Min salary of Machine Learning Scientist is 12000.0
Max salary of Machine Learning Scientist is 260000.0
Min salary of Marketing Data Analyst is 88654.0
Max salary of Marketing Data Analyst is 88654.0
Min salary of ML Engineer is 15966.0
Max salary of ML Engineer is 270000.0
Min salary of Principal Data Analyst is 75000.0
Max salary of Principal Data Analyst is 170000.0
Min salary of Principal Data Engineer is 185000.0
Max salary of Principal Data Engineer is 600000.0
Min salary of Principal Data Scientist is 148261.0
Max salary of Principal Data Scientist is 416000.0
Min salary of Product Data Analyst is 6072.0
Max salary of Product Data Analyst is 20000.0
Min salary of Research Scientist is 42000.0
Max salary of Research Scientist is 450000.0
Min salary of Staff Data Scientist is 105000.0
Max salary of Staff Data Scientist is 105000.0

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Q6&7



2020Average Salary of Research Scientist is : 246000.0  
 2021Average Salary of Research Scientist is : 85003.27272727272  
 2022Average Salary of Research Scientist is : 105569.0  
 The biggest change of Research Scientist is 140431.0

2020Average Salary of Principal Data Scientist is : 148261.0  
 2021Average Salary of Principal Data Scientist is : 239152.4  
 2022Average Salary of Principal Data Scientist is : 162674.0  
 The change of biggest of Principal Data Scientist is 95000.0

2020Average Salary of ML Engineer is : 15966.0  
 2021Average Salary of ML Engineer is : 166768.75  
 2022Average Salary of ML Engineer is : 21983.0  
 The biggest change of ML Engineer is 6017.0

2020Average Salary of Machine Learning Scientist is : 260000.0  
 2021Average Salary of Machine Learning Scientist is : 145500.0  
 2022Average Salary of Machine Learning Scientist is : 141766.66666666666  
 The biggest change of Machine Learning Scientist is 118233.33333333334

2020Average Salary of Machine Learning Manager is : 117104.0

2020Average Salary of Machine Learning Engineer is : 125389.8  
 2021Average Salary of Machine Learning Engineer is : 74611.22222222222  
 2022Average Salary of Machine Learning Engineer is : 129451.94444444444  
 The biggest change of Machine Learning Engineer is 54840.72222222222

2020Average Salary of Machine Learning Infrastructure Engineer is : 50180.0  
 2020Average Salary of Machine Learning Infrastructure Engineer is : 195000.0  
 2020Average Salary of Machine Learning Infrastructure Engineer is : 58255.0  
 The biggest change of Machine Learning Infrastructure Engineer is 144820.0

2020Average Salary of Lead Data Scientist is : 152500.0  
 2020Average Salary of Lead Data Scientist is : 40570.0  
 The biggest change of Lead Data Scientist is 111930.0

2020Average Salary of Lead Data Engineer is : 90500.0  
 2021Average Salary of Lead Data Engineer is : 179720.0  
 2022Average Salary of Lead Data Engineer is : 118187.0  
 The biggest change of Research Scientist is 89220.0

2020Average Salary of Research Scientist is : 246000.0  
 2021Average Salary of Research Scientist is : 85003.27272727272  
 2022Average Salary of Research Scientist is : 105569.0  
 The biggest change of Research Scientist is 140431.0

2020Average Salary of Principal Data Scientist is : 148261.0  
 2021Average Salary of Principal Data Scientist is : 239152.4  
 2022Average Salary of Principal Data Scientist is : 162674.0  
 The change of biggest of Principal Data Scientist is 95000.0

2020Average Salary of ML Engineer is : 15966.0  
 2021Average Salary of ML Engineer is : 166768.75  
 2022Average Salary of ML Engineer is : 21983.0  
 The biggest change of ML Engineer is 6017.0

2020Average Salary of Machine Learning Scientist is : 260000.0  
 2021Average Salary of Machine Learning Scientist is : 145500.0  
 2022Average Salary of Machine Learning Scientist is : 141766.66666666666  
 The biggest change of Machine Learning Scientist is 118233.33333333334

2020Average Salary of Machine Learning Manager is : 117104.0

2020Average Salary of Machine Learning Engineer is : 125389.8  
 2021Average Salary of Machine Learning Engineer is : 74611.22222222222  
 2022Average Salary of Machine Learning Engineer is : 129451.94444444444  
 The biggest change of Machine Learning Engineer is 54840.72222222222

2020Average Salary of Machine Learning Infrastructure Engineer is : 50180.0  
 2020Average Salary of Machine Learning Infrastructure Engineer is : 195000.0  
 2020Average Salary of Machine Learning Infrastructure Engineer is : 58255.0  
 The biggest change of Machine Learning Infrastructure Engineer is 144820.0

2020Average Salary of Lead Data Scientist is : 152500.0  
 2020Average Salary of Lead Data Scientist is : 40570.0  
 The biggest change of Lead Data Scientist is 111930.0

2020Average Salary of Lead Data Engineer is : 90500.0  
 2021Average Salary of Lead Data Engineer is : 179720.0  
 2022Average Salary of Lead Data Engineer is : 118187.0  
 The biggest change of Research Scientist is 89220.0

2020Average Salary of Lead Data Analyst is : 87000.0  
 2020Average Salary of Lead Data Analyst is : 94804.5  
 The biggest change of Lead Data Analyst is 7804.5

2020Average Salary of Director of Data Science is : 325000.0  
 2021Average Salary of Director of Data Science is : 168707.8  
 2022Average Salary of Director of Data Science is : 196979.0  
 The biggest change of Director of Data Science is 156292.2

2020Average Salary of Data Scientist is : 85970.52380952382  
 2021Average Salary of Data Scientist is : 70671.73333333334  
 2022Average Salary of Data Scientist is : 136172.0909090909  
 The biggest change of Data Scientist is 65500.35757575757

2020Average Salary of Data Science Manager is : 190200.0  
 2021Average Salary of Data Science Manager is : 143126.5  
 2022Average Salary of Data Science Manager is : 170196.6  
 The biggest change of Data Science Manager is 47073.5

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2020Average Salary of Data Science Consultant is : 54352.0
2020Average Salary of Data Science Consultant is : 17842.0
The biggest change of Data Science Consultant is 3106.1500000000006
2020Average Salary of Data Engineering Manager is : 69566.0
2020Average Salary of Data Engineering Manager is : 15900.0
The biggest change of Data Engineering Manager is 8942.0
2020Average Salary of Data Engineer is : 88162.0
2020Average Salary of Data Engineer is : 31370.5125
2020Average Salary of Data Engineer is : 126776.68623921349
The biggest change of Data Engineer is 43173.1457921349
2020Average Salary of Data Analyst is : 45547.2807428572
2020Average Salary of Data Analyst is : 79055.4178470289
2020Average Salary of Data Analyst is : 108550.1297538214
The biggest change of Data Analyst is 95003.404011741884
2020Average Salary of Computer Vision Engineer is : 67090.0
2020Average Salary of Computer Vision Engineer is : 23836.666666666668
2020Average Salary of Computer Vision Engineer is : 87550.0
The biggest change of Computer Vision Engineer is 43861.33333333333
2020Average Salary of Business Data Analyst is : 117800.0
2020Average Salary of Business Data Analyst is : 59182.0
2020Average Salary of Business Data Analyst is : 44677.0
The biggest change of Business Data Analyst is 78620.0
2020Average Salary of BI Data Analyst is : 88000.0
2020Average Salary of BI Data Analyst is : 70100.0
The biggest change of BI Data Analyst is 27893.800000000003
2020Average Salary of Big Data Engineer is : 97690.33333333333
2020Average Salary of Big Data Engineer is : 24544.0
The biggest change of Big Data Engineer is 73146.33333333333
2020Average Salary of AI Scientist is : 40960.0
2020Average Salary of AI Scientist is : 24263.25
2020Average Salary of AI Scientist is : 160500.0
The biggest change of AI Scientist is 21632.78
2020Average Salary of Principal Data Analyst is : 178000.0
2020Average Salary of Principal Data Analyst is : 78000.0
The biggest change of Principal Data Analyst is 95000.0
2020Average Salary of Head of Data Science is : 87600.0
2020Average Salary of Head of Data Science is : 18937.5
The biggest change of Head of Data Science is 94637.5
2020Average Salary of Financial Data Analyst is : 460000.0
2020Average Salary of Financial Data Analyst is : 108000.0
The biggest change of Financial Data Analyst is 95000.0
2020Average Salary of Data Science Engineer is : 87705.0
2020Average Salary of Data Science Engineer is : 68000.0
The biggest change of Data Science Engineer is 23705.0
2020Average Salary of Data Architect is : 166666.66666666666
2020Average Salary of Data Architect is : 180370.625
The biggest change of Data Architect is 18469.958333333334
2020Average Salary of Data Analytics Manager is : 128666.66666666667
2020Average Salary of Data Analytics Manager is : 127480.0
The biggest change of Data Analytics Manager is 816.3333333333333
2020Average Salary of Computer Vision Software Engineer is : 83573.0
2020Average Salary of Computer Vision Software Engineer is : 189000.0
The biggest change of Computer Vision Software Engineer is 61227.0
2020Average Salary of Applied Machine Learning Scientist is : 230700.0
2020Average Salary of Applied Machine Learning Scientist is : 53437.0
The biggest change of Applied Machine Learning Scientist is 177261.0
2020Average Salary of Data Analytics Engineer is : 79732.33333333333
2020Average Salary of Data Analytics Engineer is : 30800.0
The biggest change of Data Analytics Engineer is 59732.33333333333
2020Average Salary of Data Analytics Lead is : 47000.0
2020Average Salary of Product Data Analyst is : 13036.0
2020Average Salary of Marketing Data Analyst is : 667076.0
2020Average Salary of Machine Learning Developer is : 100000.0
2020Average Salary of Head of Data is : 189279.66666666666
2020Average Salary of Finance Data Analyst is : 49306.0
2020Average Salary of Director of Data Engineering is : 189707.0
2020Average Salary of Data Specialist is : 105000.0
2020Average Salary of Computer Cloud Data Business Engineer is : 124647.0
2020Average Salary of Big Data Architect is : 97732.0
2020Average Salary of Applied Data Scientist is : 85171.5
2020Average Salary of AI Computer Vision Researcher is : 5409.0
2020Average Salary of R/P Engineer is : 37130.0
2020Average Salary of Lead Machine Learning Engineer is : 87932.0
2020Average Salary of Head of Machine Learning is : 79000.0
2020Average Salary of ML Researcher is : 54091.0
2020Average Salary of Analytics Engineer is : 175000.0
To get the biggest change and smallest change, first, exclude the titles that appear only once, and then subtract the highest and lowest wages in the title to get the wage difference. The biggest change is Financial Data Analyst,$260000,smallest change is: Data Analytics Manager:$818

```

Q8

```

The average salary for 0 remote ratio is : 22252.120263591434
The average salary for 50 remote ratio is : 13182.009884678748
The average salary for 100 remote ratio is : 76863.73970345964
There are 3 entry/entries They are: {0.0, 50.0, 100.0}

```

Q9

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line: 176 Salary: 2859.0 Location: MX
line: 252 Salary: 600000.0 Location: US
#####

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Q10

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Right now I don't want to change my resume. It seems like title about data paid a fine salary

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