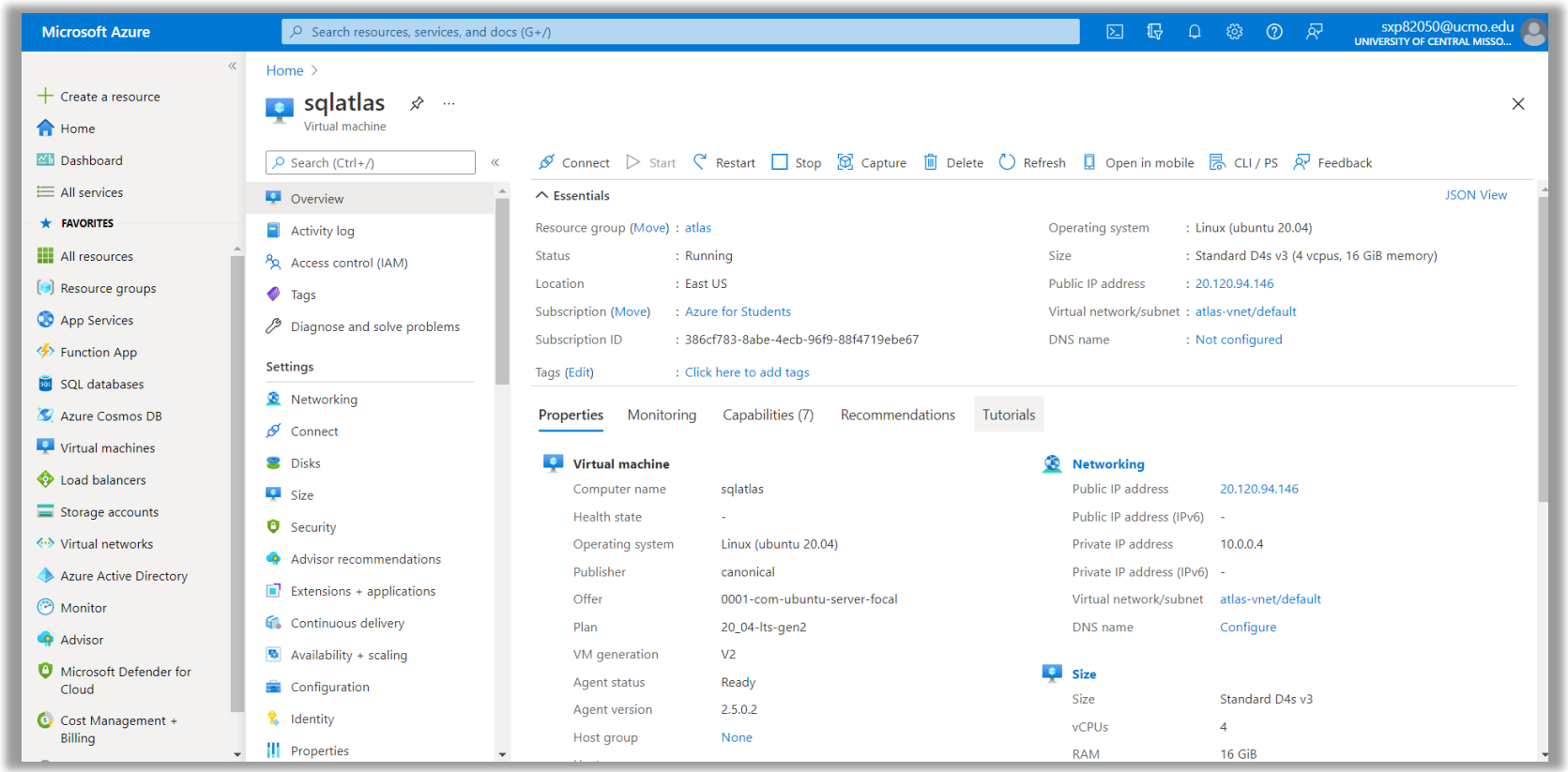
Final Project: Final Report

Project Group: Python Group

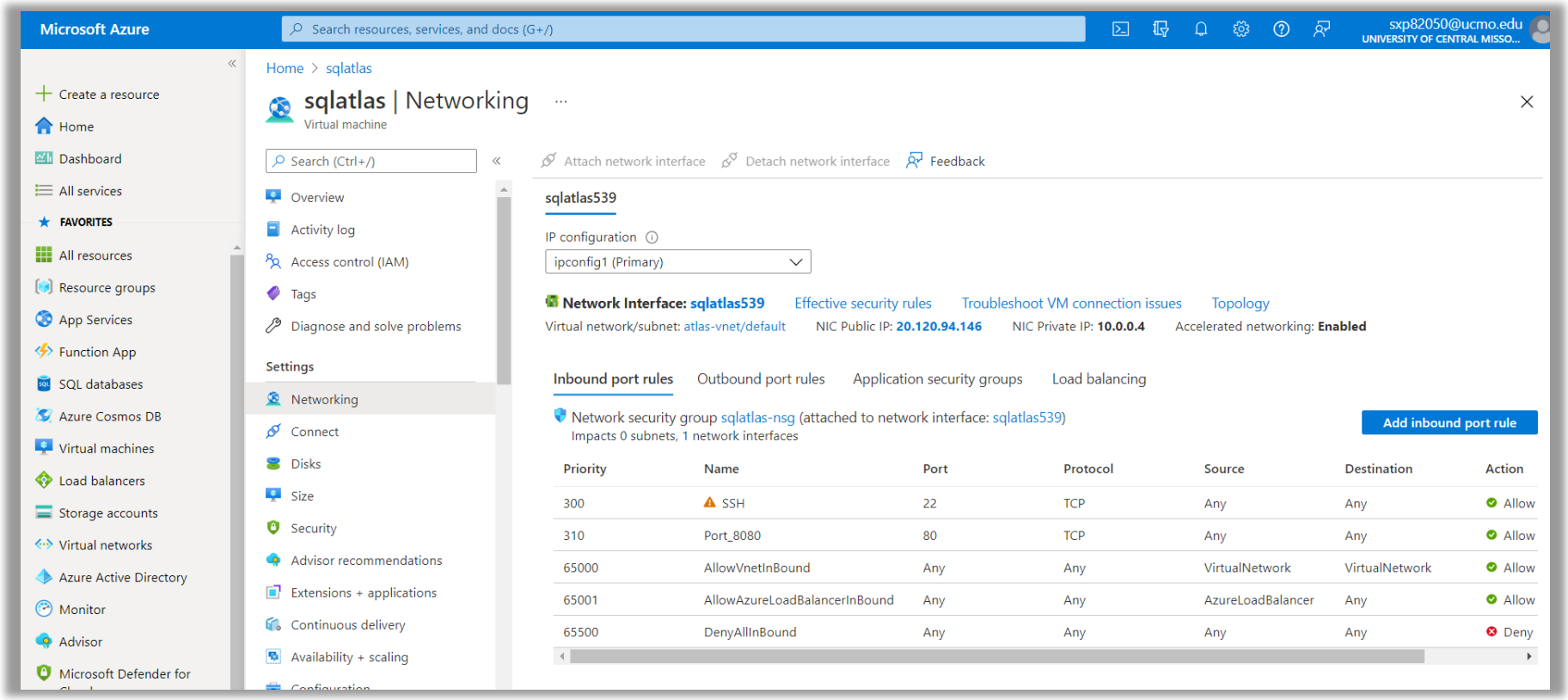
Student Name: Sandeep Kumar Paul

Project Name: SqlAtlas Data-Analysis Web App

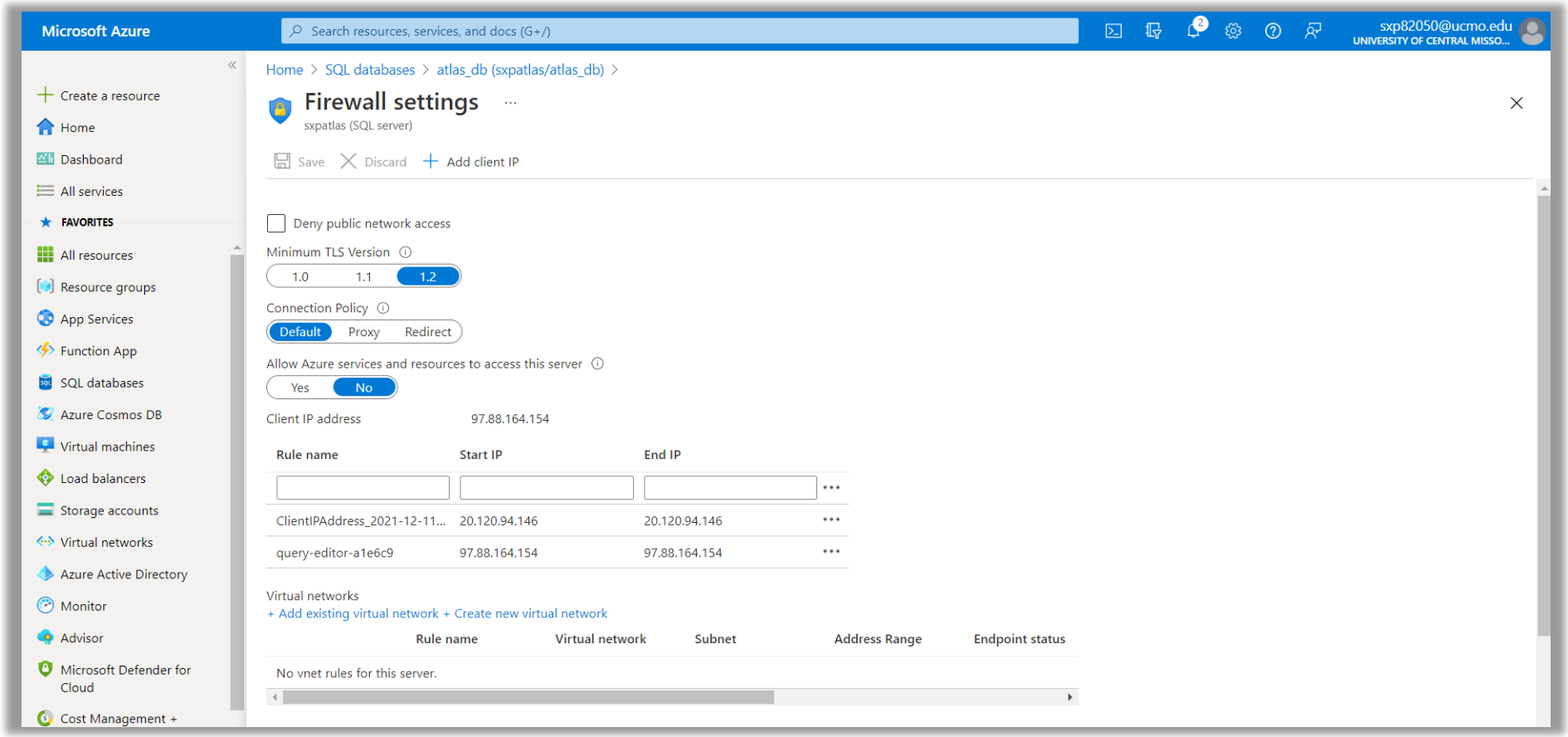
Provisioning an Azure VM with Ubuntu 20.04 Linux Operating System via Azure-Portal:



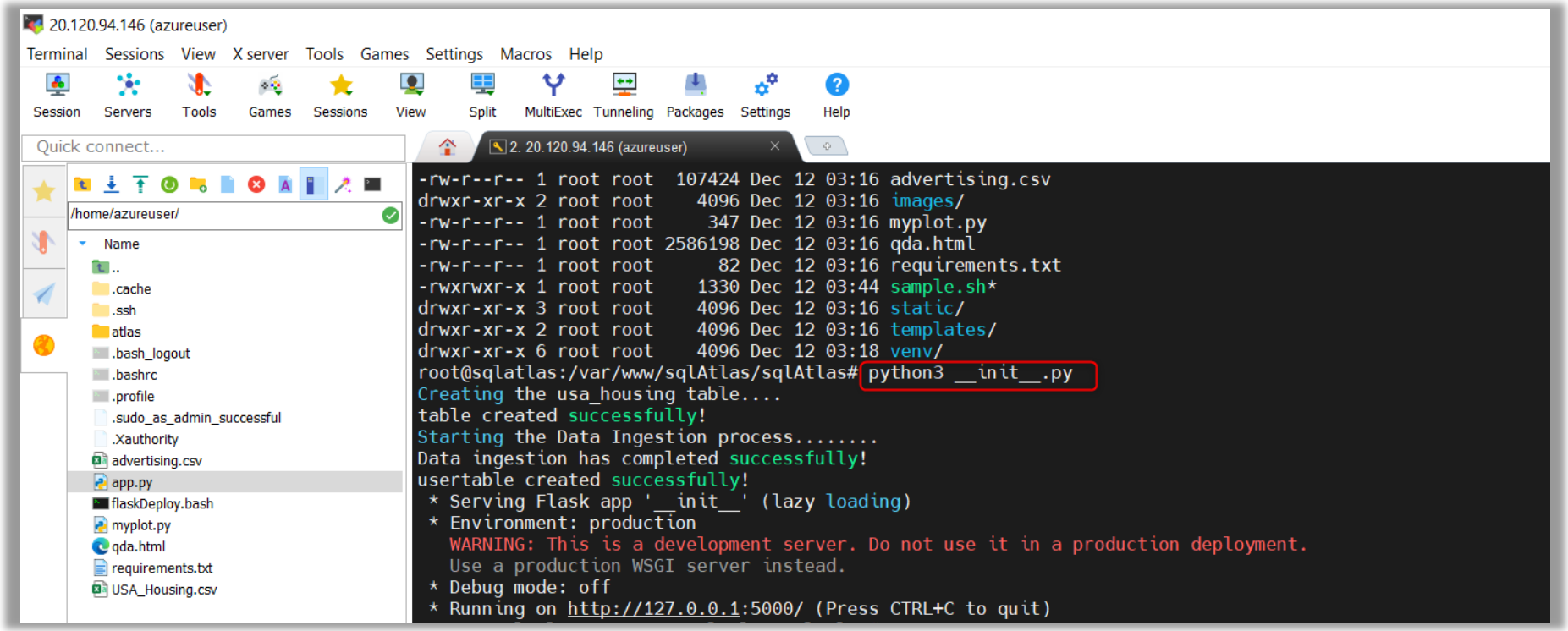
Configuring the Virtual Machine Firewall to access the SSH and HTTP for Web-Hosting:



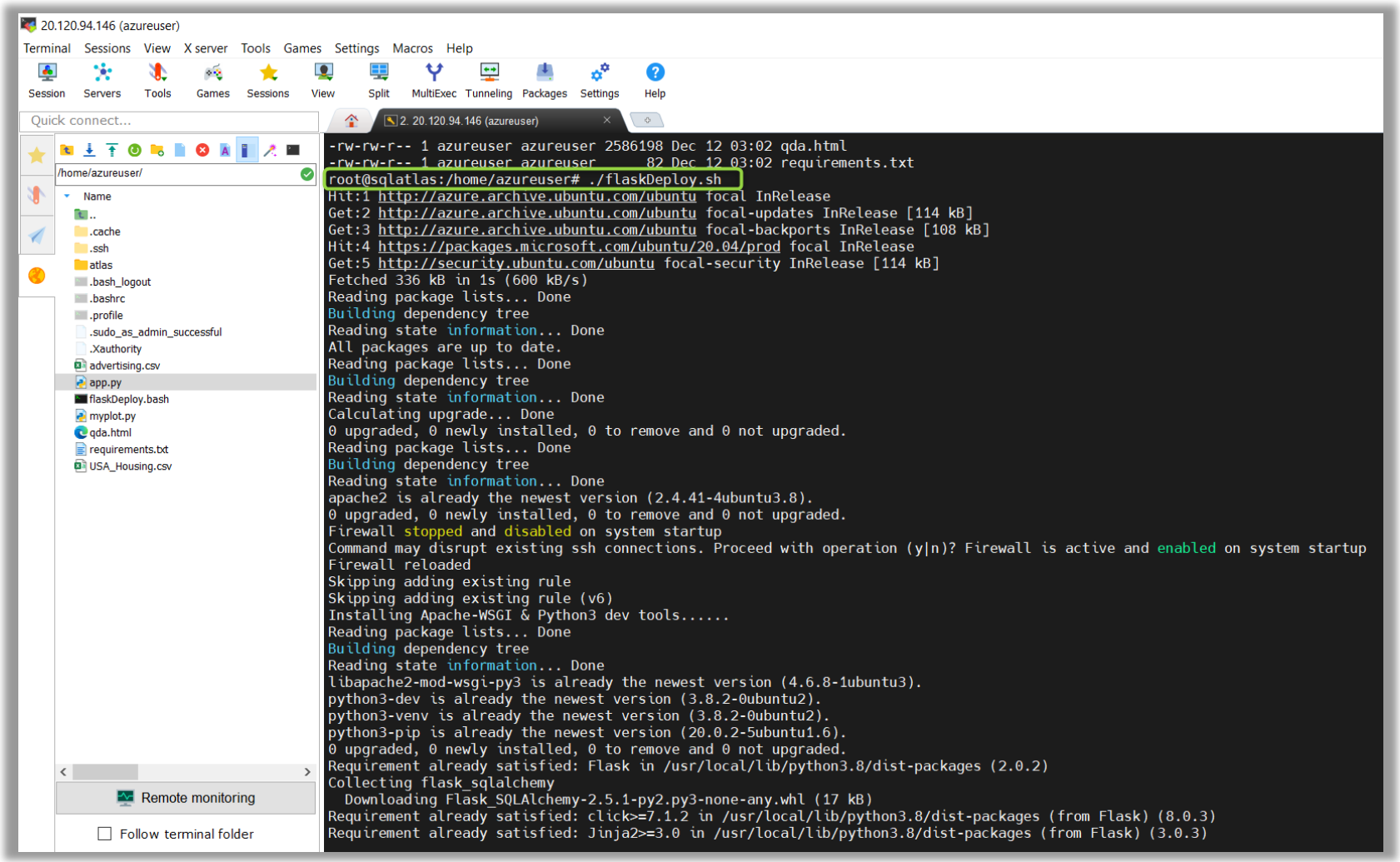
Configuring the Azure SQL Database firewall to allow the above created Azure VM to access the DB resources:



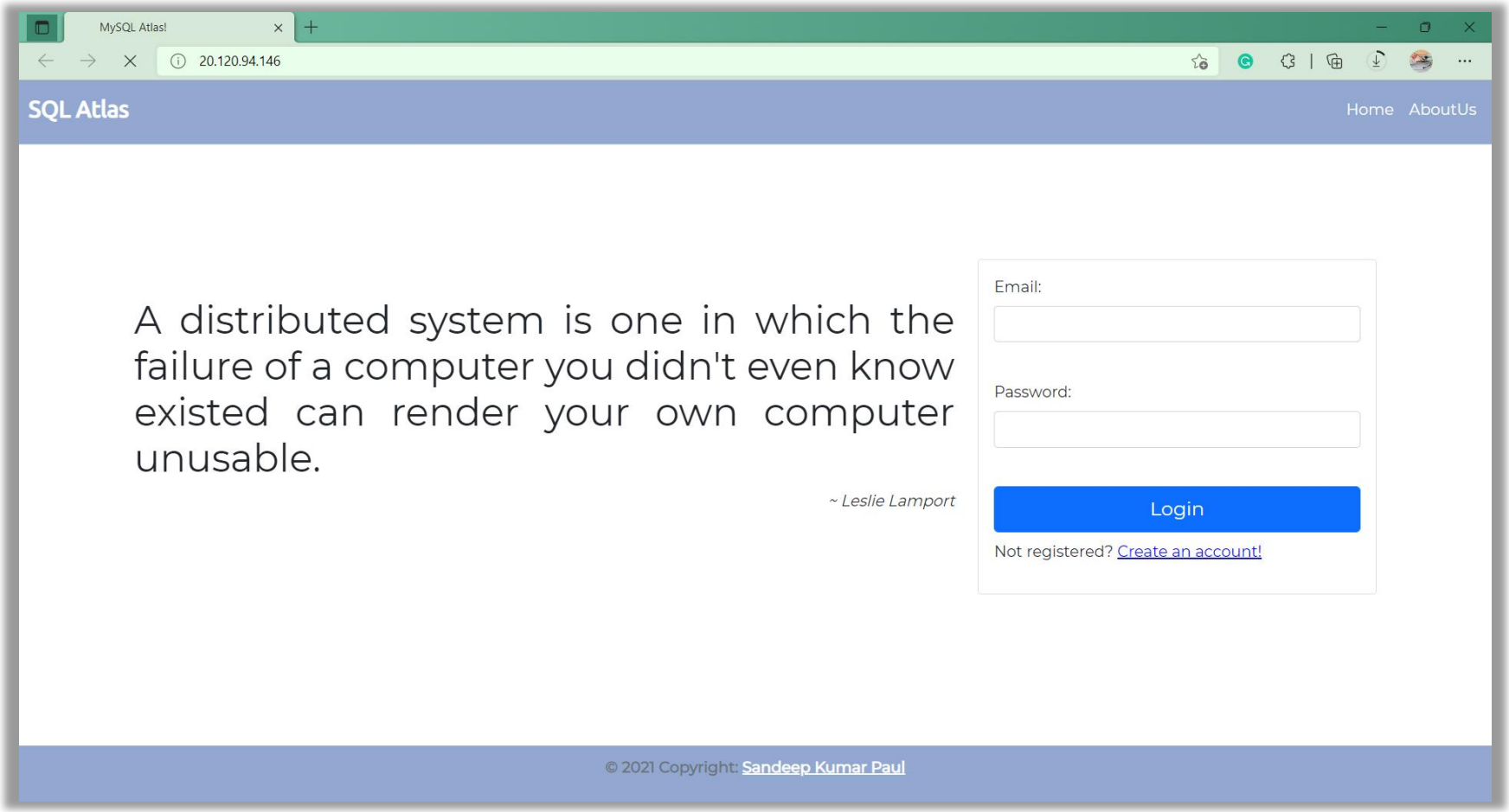
This is a test on Azure VM to check if there is any error in Python code while running the application:



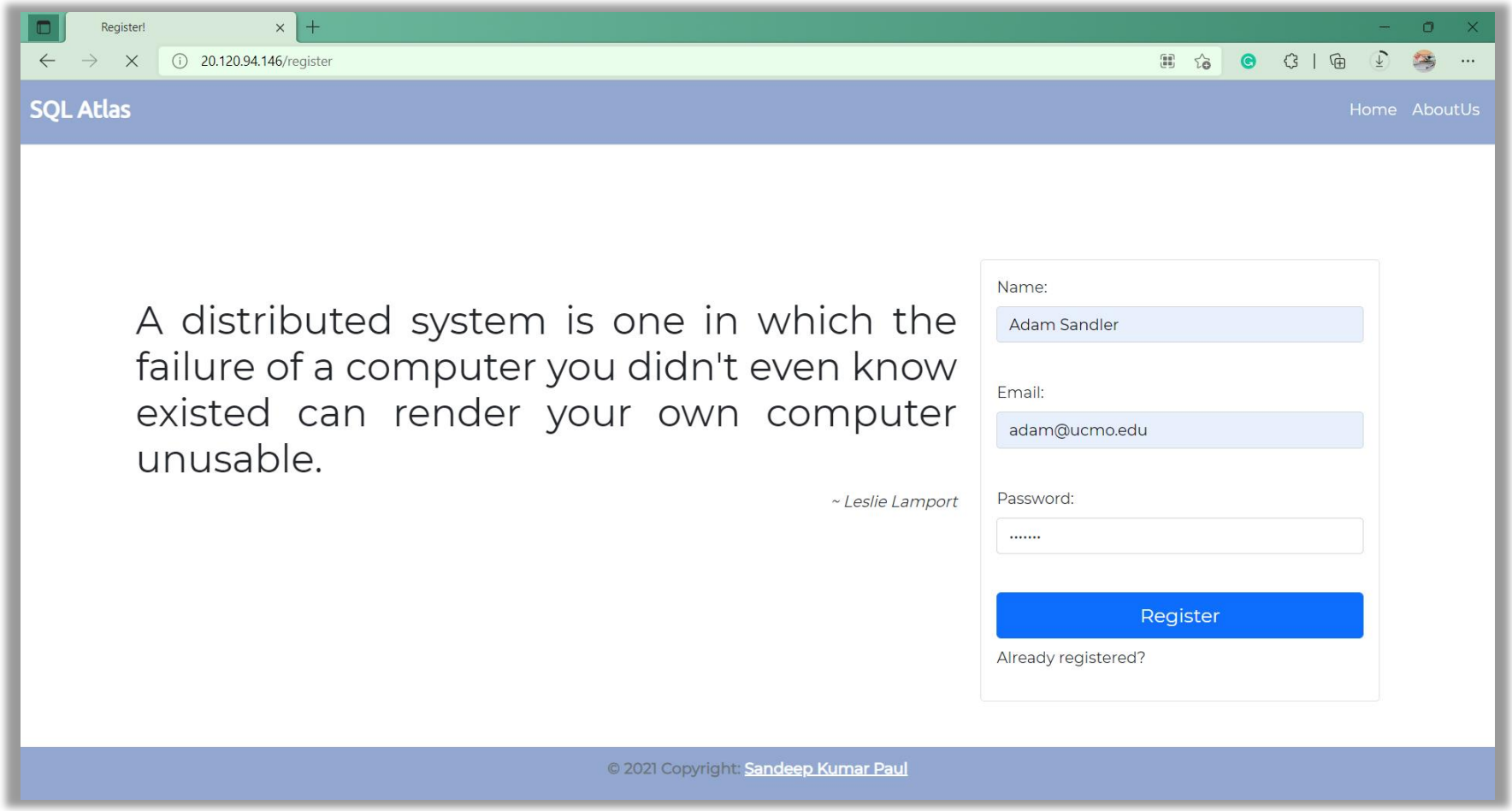
Running the Deployment script and manually copying the Python files into the VM:



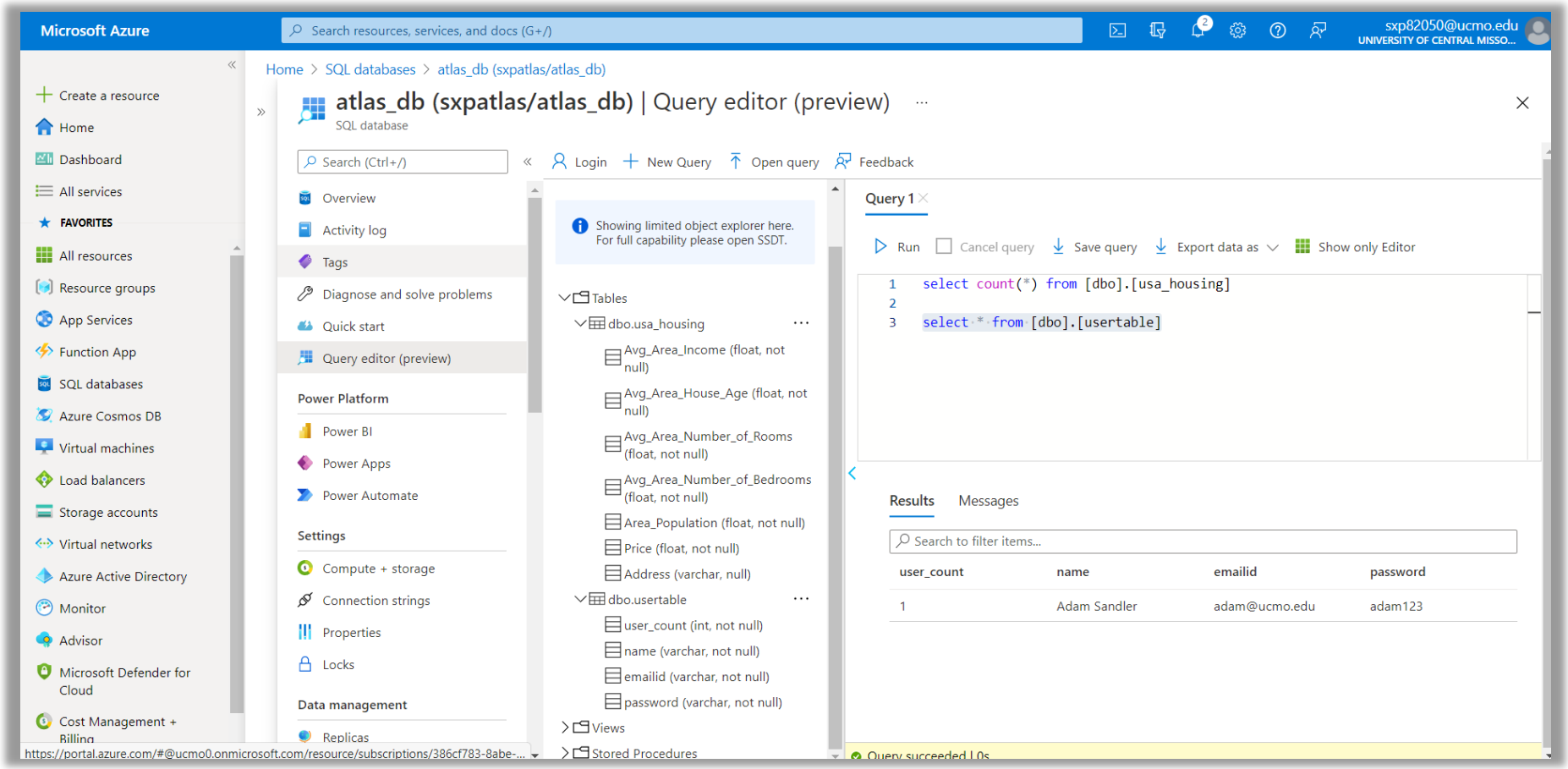
Home/Log in Page of the Web-App:



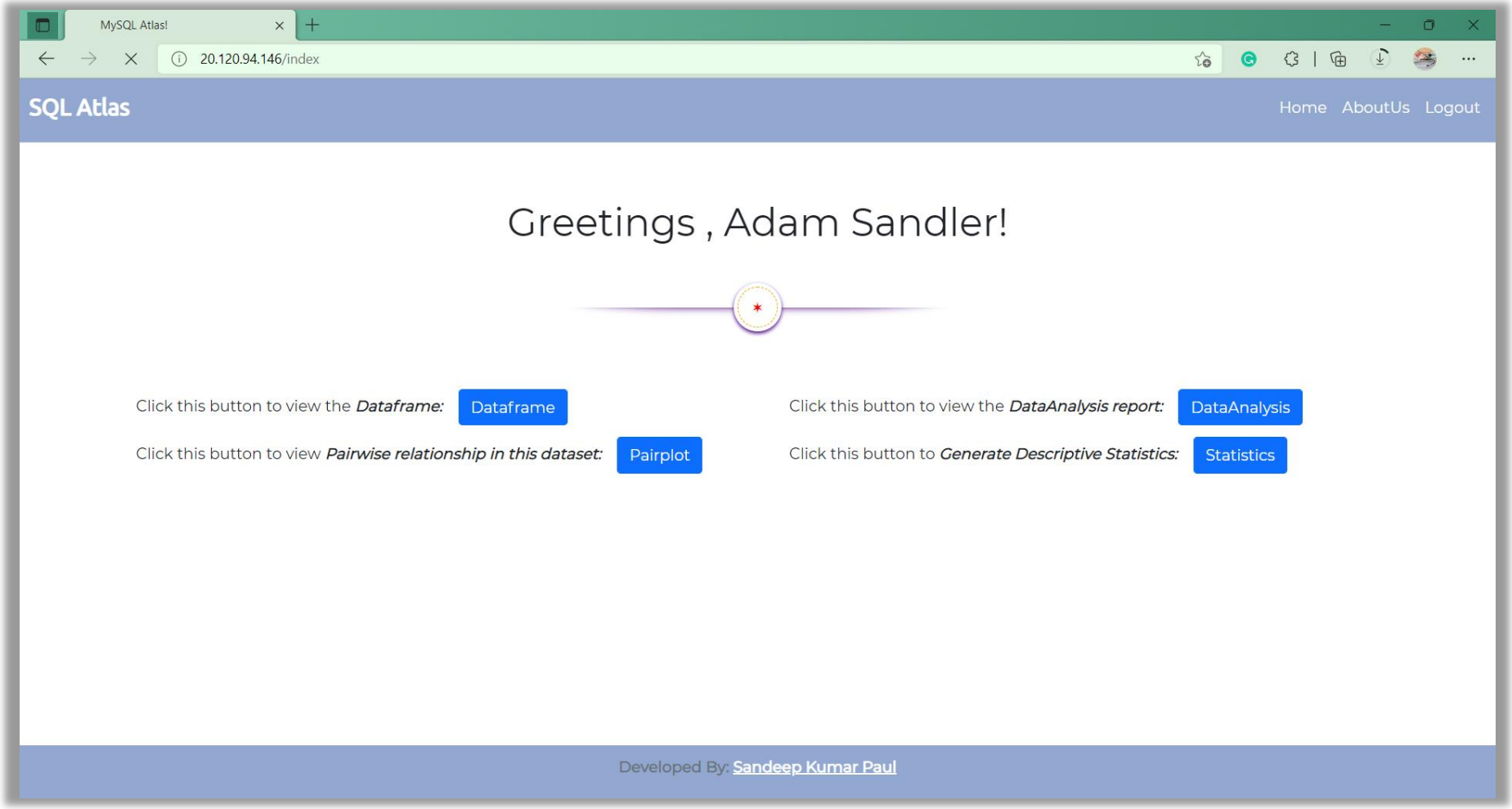
Registration Page:



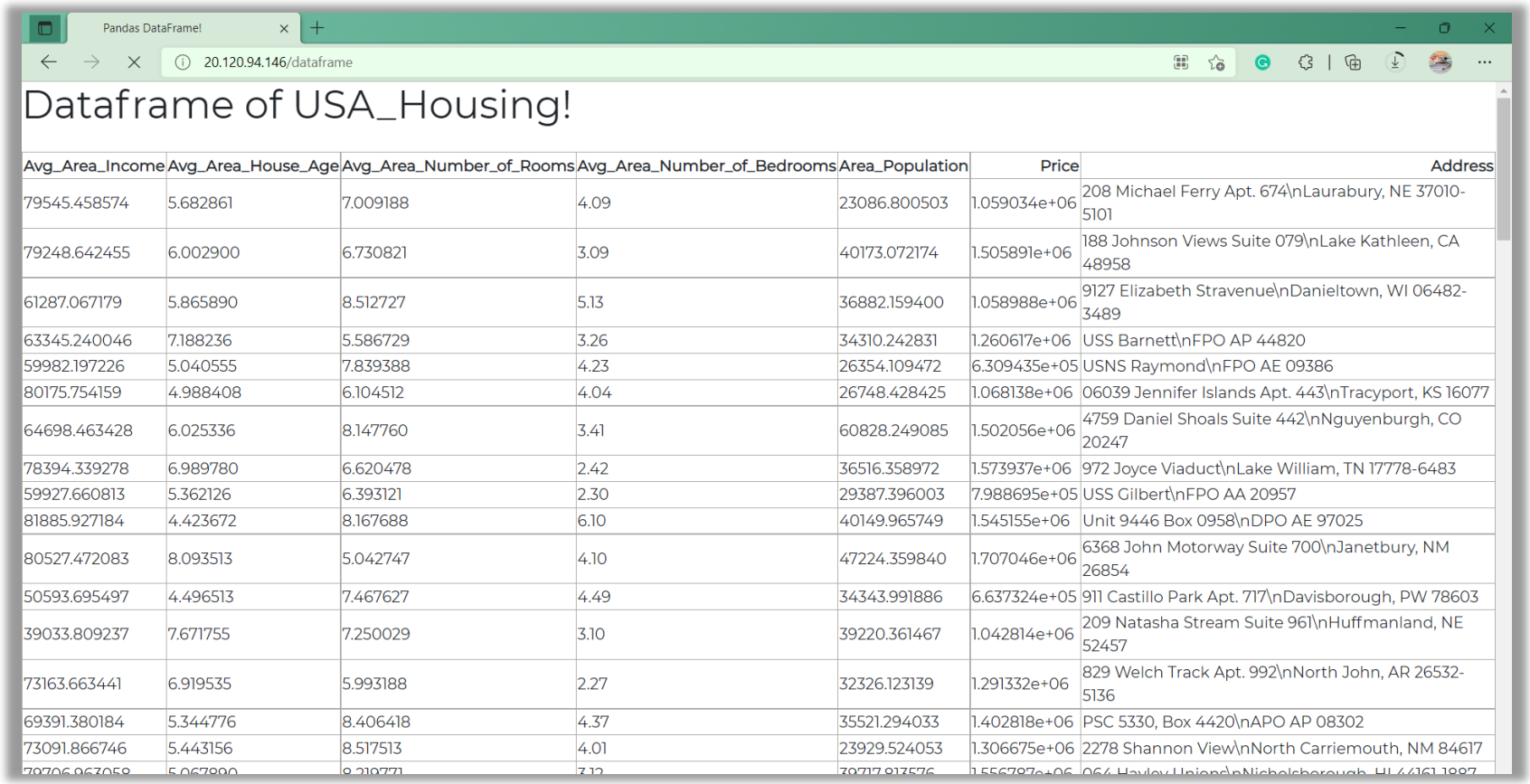
Post registration, this is a validation to check whether the record has been created on the database:



User Dashboard Page:

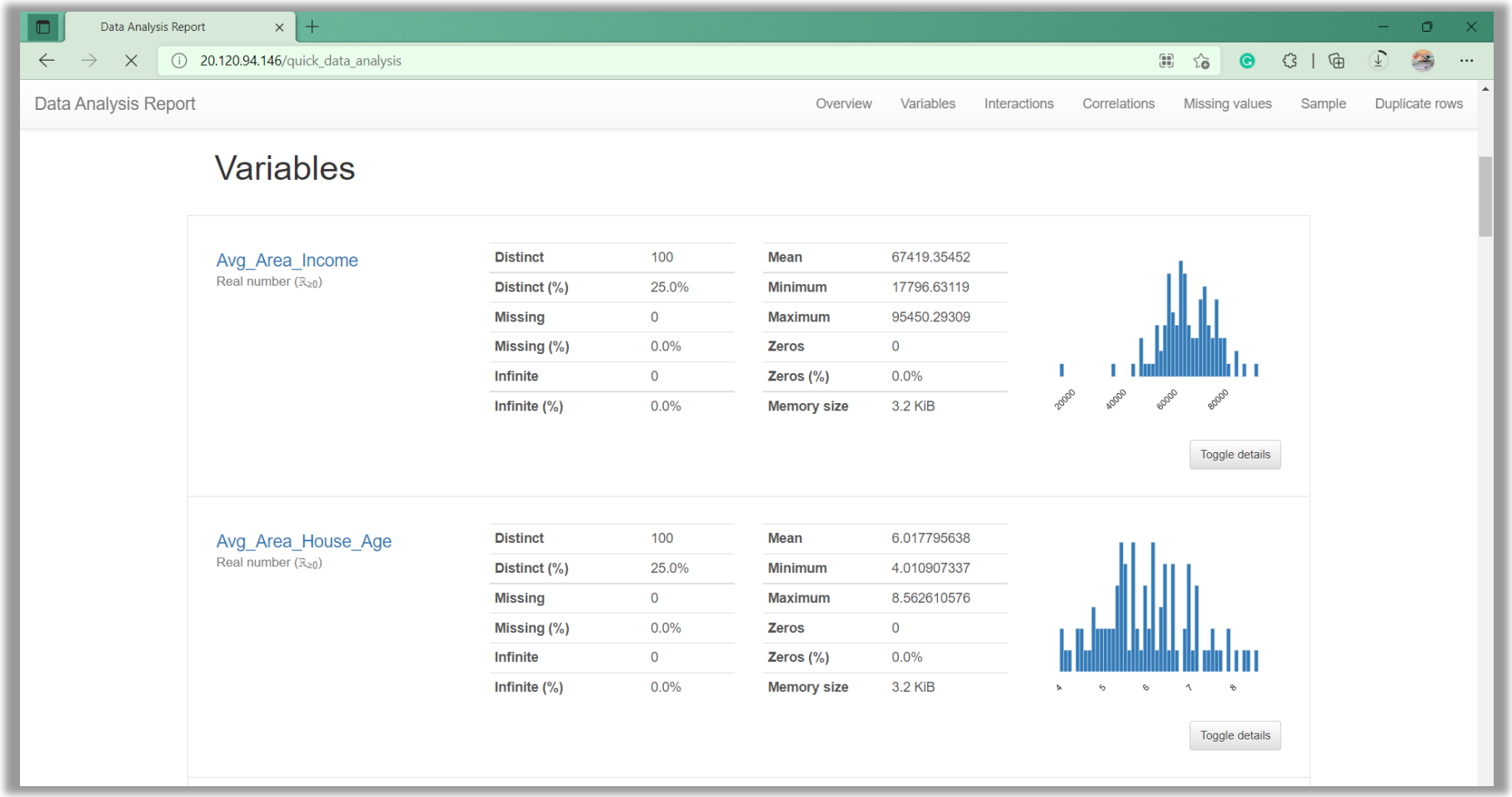


Page displaying the dataframe of the SQL table:

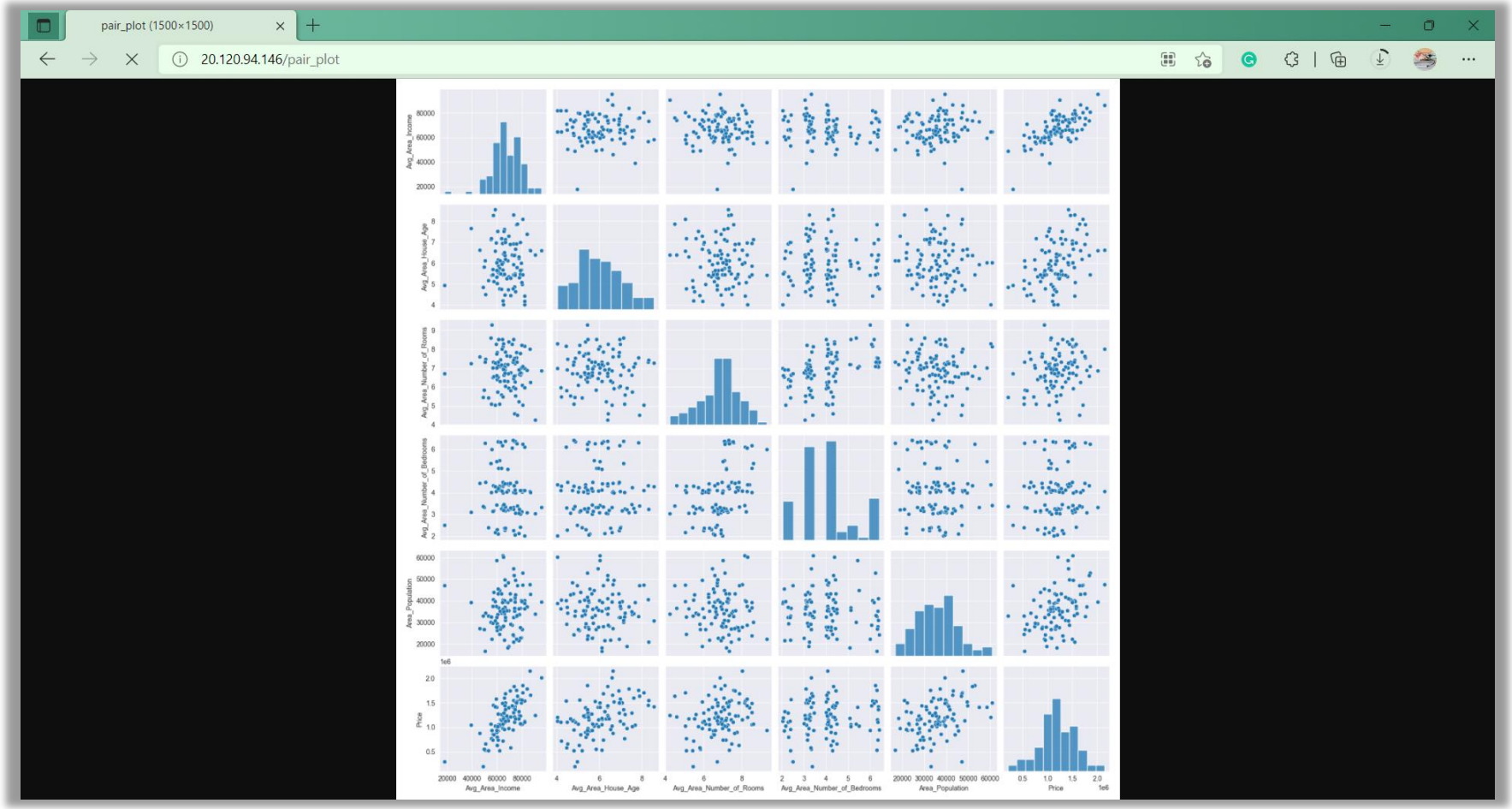


Avg_Area_Income	Avg_Area_House_Age	Avg_Area_Number_of_Rooms	Avg_Area_Number_of_Bedrooms	Area_Population	Price	Address
79545.458574	5.682861	7.009188	4.09	23086.800503	1.059034e+06	208 Michael Ferry Apt. 674\nLaurabury, NE 37010-5101
79248.642455	6.002900	6.730821	3.09	40173.072174	1.505891e+06	188 Johnson Views Suite 079\nLake Kathleen, CA 48958
61287.067179	5.865890	8.512727	5.13	36882.159400	1.058988e+06	9127 Elizabeth Stravenue\nDanieltown, WI 06482-3489
63345.240046	7.188236	5.586729	3.26	34310.242831	1.260617e+06	USS Barnett\nFPO AP 44820
59982.197226	5.040555	7.839388	4.23	26354.109472	6.309435e+05	USNS Raymond\nFPO AE 09386
80175.754159	4.988408	6.104512	4.04	26748.428425	1.068138e+06	06039 Jennifer Islands Apt. 443\nTracyport, KS 16077
64698.463428	6.025336	8.147760	3.41	60828.249085	1.502056e+06	4759 Daniel Shoals Suite 442\nNguyenburgh, CO 20247
78394.339278	6.989780	6.620478	2.42	36516.358972	1.573937e+06	972 Joyce Viaduct\nLake William, TN 17778-6483
59927.660813	5.362126	6.393121	2.30	29387.396003	7.988695e+05	USS Gilbert\nFPO AA 20957
81885.927184	4.423672	8.167688	6.10	40149.965749	1.545155e+06	Unit 9446 Box 0958\nDPO AE 97025
80527.472083	8.093513	5.042747	4.10	47224.359840	1.707046e+06	6368 John Motorway Suite 700\nJanetbury, NM 26854
50593.695497	4.496513	7.467627	4.49	34343.991886	6.637324e+05	911 Castillo Park Apt. 717\nDavisborough, PW 78603
39033.809237	7.671755	7.250029	3.10	39220.361467	1.042814e+06	209 Natasha Stream Suite 961\nHuffmanland, NE 52457
73163.663441	6.919535	5.993188	2.27	32326.123139	1.291332e+06	829 Welch Track Apt. 992\nNorth John, AR 26532-5136
69391.380184	5.344776	8.406418	4.37	35521.294033	1.402818e+06	PSC 5330, Box 4420\nAPO AP 08302
73091.866746	5.443156	8.517513	4.01	23929.524053	1.306675e+06	2278 Shannon View\nNorth Carriemouth, NM 84617
79706.963058	5.067890	8.219771	3.12	39717.813576	1.556787e+06	064 Hayley Unions\nNicholsborough, HI 44161-1887

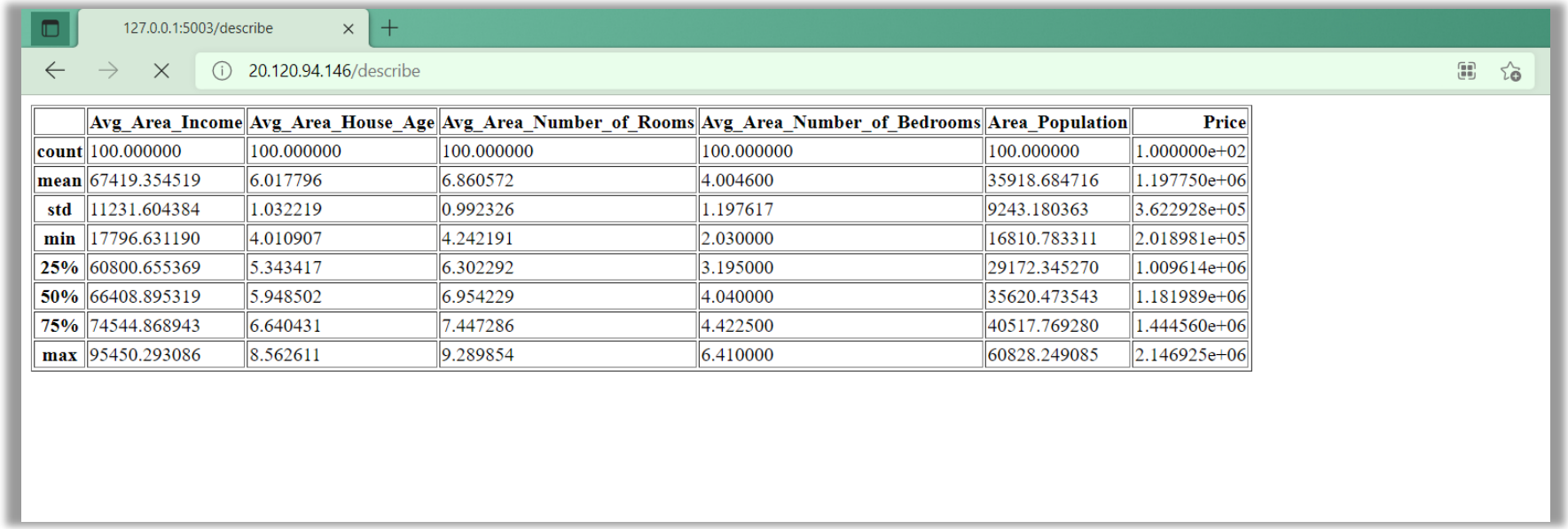
Page displaying the Descriptive Analysis report of the SQL table:



Page displaying the PairPlot of the SQL table:



Page displaying the Statistical Values of the SQL table:



	Avg_Area_Income	Avg_Area_House_Age	Avg_Area_Number_of_Rooms	Avg_Area_Number_of_Bedrooms	Area_Population	Price
count	100.000000	100.000000	100.000000	100.000000	100.000000	1.000000e+02
mean	67419.354519	6.017796	6.860572	4.004600	35918.684716	1.197750e+06
std	11231.604384	1.032219	0.992326	1.197617	9243.180363	3.622928e+05
min	17796.631190	4.010907	4.242191	2.030000	16810.783311	2.018981e+05
25%	60800.655369	5.343417	6.302292	3.195000	29172.345270	1.009614e+06
50%	66408.895319	5.948502	6.954229	4.040000	35620.473543	1.181989e+06
75%	74544.868943	6.640431	7.447286	4.422500	40517.769280	1.444560e+06
max	95450.293086	8.562611	9.289854	6.410000	60828.249085	2.146925e+06