

## Завдання 2:

За допомогою пакету *Pandas (Python)* здійснити детальну описову статистику даних з тлумаченням отриманих результатів.

1. Дані з усіма варіантами перетворити на електронну таблицю. Завантажити цю таблицю в *Pandas*. Вибрати дані свого варіанту. Сформуванати варіаційний ряд. Вивести перші і останні п'ять значень. (1)
2. Знайти числові характеристики середньої тенденції і розкиду, а також коефіцієнти асиметрії та ексцесу, квартилі. (1)
3. Обчислити довірча ймовірність та розмір вибірки для оцінювання середнього (1)
4. Графічно візуалізувати дані різними методами: Побудувати гістограми та емпіричні функції розподілу для різної кількості інтервалів (три випадки). (1)
5. Графічно візуалізувати дані різними методами :Побудувати коробки з вусами. (1)
6. Запропонувати своє бачення про природу даних і зробити висновок в предметній області. Зробити висновок. Звіт завантажити на ДІСТЕДУ (1)

Вар.№1	Вар.№2	Вар.№3	Вар.№4	Вар.№5	Вар.№6	Вар.№7	Вар.№8	Вар.№9	Вар.№10	Вар.№11	Вар.№12
.175	.662	6.133	.505	.566	-3.795	.675	-10.00	4.990	.064	-1.569	4.736
.609	.468	7.459	.318	.753	1.349	.386	16.967	5.919	.240	-3.235	-.127
.330	.430	1.887	.623	.731	3.216	.513	-2.405	2.818	.292	2.869	5.775
.275	.296	5.260	.204	.805	-.871	.214	2.132	3.820	.233	7.578	3.599
.441	.597	6.442	.302	.757	2.180	.671	-2.154	6.524	.352	5.000	10.965
.248	.491	2.163	.237	.307	.950	.618	.370	5.225	.747	2.432	5.077
.240	.917	1.030	.497	.791	-2.995	.627	-1.184	1.401	.366	3.053	5.504
.639	.622	-.519	.649	.933	-2.768	.648	14.316	5.310	.598	3.182	6.414
.557	.864	-3.903	.264	.619	2.934	.445	3.747	5.127	.185	5.528	7.048
.317	.513	-1.644	.447	.771	-.451	.300	1.658	7.083	.062	-1.557	4.374
.505	.437	4.187	.306	.595	1.193	.460	-3.118	5.017	.415	1.029	8.992
.146	.506	7.364	.529	.739	-3.295	.466	8.541	5.698	.558	-9.953	7.275
.229	.580	4.210	.154	.730	-3.469	.779	4.259	4.802	.198	1.632	4.795
.739	.819	-.249	.239	.534	3.527	.425	5.319	3.572	.403	4.815	9.393
.367	.778	11.411	.669	.682	.987	.322	14.013	4.283	.359	9.945	5.477
.195	.568	7.490	.289	.675	-.423	.279	1.231	5.276	.385	-3.325	2.644

.701	.206	2.237	.279	.321	-3.362	.584	3.643	5.371	.401	4.131	8.328
.577	.523	2.028	.246	.671	-.022	.457	1.504	4.224	.512	6.350	4.047
.271	.375	7.830	.351	.757	1.199	.305	-9.714	4.335	.518	7.654	5.418
.213	.522	1.415	.308	.772	.844	.802	2.613	5.921	.330	.240	2.879
.316	.777	6.498	.394	.755	2.994	.433	3.202	4.840	.358	4.050	8.381
.319	.713	3.366	.727	.627	1.393	.521	1.726	3.803	.307	-5.593	10.219
.557	.716	2.364	.243	.698	-.388	.529	-12.568	4.206	.292	-5.398	4.174
.776	.355	6.292	.149	.553	-5.018	.631	-6.621	3.266	.436	-1.354	1.258
.386	.591	6.456	.357	.826	-1.040	.594	1.344	5.009	.431	1.435	3.770
.482	.562	4.971	.351	.851	-.956	.337	7.928	2.404	.243	-2.264	6.196
.658	.713	.846	.428	.616	-1.780	.228	11.330	3.524	.461	9.444	2.606
.081	.346	5.762	.354	.823	-1.725	.768	6.159	2.916	.374	.050	10.076
.673	.633	-.417	.330	.690	3.546	.302	5.390	4.229	.227	-4.013	6.561
.158	.864	3.827	.231	.415	-1.318	.455	-13.743	2.319	.295	11.242	7.131
.395	.671	-1.346	.133	.583	3.541	.555	-5.071	5.846	.056	6.791	6.080
.384	.881	1.402	.536	.644	4.744	.723	4.073	6.397	.114	-6.796	9.667
.350	.611	1.989	.195	.774	3.029	.444	6.407	5.648	.120	.553	2.595
.299	.660	8.320	.390	.722	3.015	.708	7.835	3.753	.285	7.138	4.557
.634	.691	2.068	.206	.514	1.408	.681	6.902	4.899	.109	7.898	6.319
.291	.518	1.770	.168	.757	-.741	.478	5.719	5.861	.134	-3.257	7.217
.617	.599	8.315	.452	.803	3.131	.798	-4.725	4.604	.381	7.618	3.307
.454	.763	3.144	.608	.558	.501	.461	-3.929	5.492	.117	6.255	5.068
.213	.724	2.098	.625	.806	-1.285	.435	7.245	4.105	.405	-1.867	8.978
.319	.412	4.111	.162	.775	2.589	.398	-2.419	4.991	.071	1.032	2.361
.620	.384	-.517	.306	.739	.954	.833	1.205	5.187	.074	6.637	5.780
.345	.630	-.768	.567	.761	.958	.573	1.812	3.964	.191	4.703	6.741
.466	.684	6.538	.446	.768	1.997	.522	2.321	4.708	.376	-6.270	6.508
.605	.654	4.882	.499	.856	-.302	.369	5.550	2.567	.467	3.812	4.892
.143	.332	1.480	.410	.285	2.073	.631	11.635	4.215	.276	.441	1.154
.569	.455	.914	.215	.918	.104	.490	-3.546	4.991	.072	6.236	8.288
.565	.551	.648	.218	.517	.632	.319	.781	6.693	.575	-2.043	4.542
.580	.552	-2.587	.595	.501	.271	.381	-3.266	6.583	.347	.132	4.681

.547	.688	6.367	.586	.432	2.196	.366	-5.004	3.712	.125	3.622	8.557
.299	.573	3.641	.475	.683	1.897	.466	7.294	2.278	.308	-.504	7.296
.497	.363	1.551	.284	.916	3.183	.654	-1.291	3.092	.458	-.102	8.897
.390	.650	-2.095	.639	.674	1.990	.473	-3.012	5.657	.191	4.840	6.568
.125	.793	3.650	.584	.408	.015	.536	2.997	5.074	.676	-2.367	8.449
.434	.533	5.038	.195	.795	.255	.477	-4.510	5.546	.170	6.565	3.446
.400	.365	.930	.271	.887	-1.104	.364	3.361	5.322	.118	.401	10.448
.316	.880	2.614	.271	.741	-1.081	.412	1.043	4.301	.052	7.688	2.488
.457	.210	4.803	.273	.962	-1.705	.834	5.273	5.387	.240	7.429	10.406
.480	.831	.447	.644	.679	2.264	.249	23.868	6.205	.407	10.533	7.034
.585	.635	1.169	.448	.705	2.256	.537	-6.431	4.263	.486	6.812	6.158
.388	.416	3.912	.358	.561	-2.176	.744	-.076	4.013	.403	11.660	4.207
.196	.660	1.759	.574	.582	-.603	.368	1.860	3.081	.443	7.508	4.632
.145	.652	3.428	.088	.769	.161	.431	1.967	4.673	.531	7.803	5.690
.605	.749	2.987	.472	.647	-1.546	.635	5.239	5.183	.080	-.504	4.266
.334	.819	10.905	.277	.765	2.010	.531	-1.384	5.507	.197	6.274	5.292
.459	.737	2.433	.360	.653	1.202	.430	-1.200	3.374	.123	.840	9.501
.842	.610	4.996	.557	.655	-2.800	.844	3.204	4.625	.437	.671	6.550
.207	.865	2.456	.197	.712	5.824	.884	.122	2.953	.107	4.024	6.592
.224	.936	7.340	.359	.688	1.740	.474	1.795	5.483	.255	2.103	5.164
.154	.844	1.325	.626	.310	-.939	.593	6.394	4.298	.289	11.833	2.287
.337	.658	3.832	.180	.949	-.837	.323	-1.547	4.396	.498	.242	8.455
.843	.503	-3.541	.267	.637	1.468	.652	6.805	5.960	.087	-2.625	6.927
.472	.434	3.648	.599	.630	6.845	.264	-6.272	6.725	.292	4.333	3.372
.578	.889	.742	.586	.835	2.486	.450	.692	5.019	.248	7.918	5.955
.601	.668	1.286	.123	.659	-.308	.771	1.967	3.233	.067	2.554	-.477
.411	.838	3.320	.151	.817	2.947	.673	1.748	6.991	.155	-.578	6.248
.182	.332	1.599	.465	.706	1.584	.730	6.260	4.873	.506	-1.067	1.747
.721	.543	4.818	.606	.511	-.251	.461	1.200	2.415	.187	11.432	3.409
.571	.425	-4.947	.318	.526	-1.994	.448	-8.416	6.397	.441	8.920	5.331
.267	.593	4.128	.450	.266	2.289	.594	7.571	4.011	.696	-1.963	2.128
.751	.428	-3.251	.543	.699	2.152	.336	2.428	6.495	.141	13.136	4.474

.322	.633	-1.177	.142	.966	.018	.252	4.022	6.030	.183	1.351	5.076
.217	.479	-1.210	.547	.678	1.217	.735	17.638	5.125	.273	1.615	7.291
.512	.477	.959	.369	.364	-2.024	.389	5.994	5.287	.162	-.359	1.712
.505	.593	6.865	.481	.823	2.021	.382	8.886	4.122	.171	2.463	7.347
.562	.711	.314	.515	.965	-3.607	.778	4.459	4.227	.469	.018	4.791
.636	.639	5.341	.387	.529	-.672	.644	3.876	4.509	.346	5.096	4.662
.142	.398	-1.884	.506	.550	6.967	.714	-3.319	4.591	.364	-.543	7.039
.146	.277	5.486	.191	.712	2.614	.500	-4.241	5.688	.402	-1.220	4.649
.593	.402	-3.754	.396	.649	-2.128	.450	-7.619	5.536	.201	-9.793	5.282
.645	.371	-.934	.706	.728	3.432	.541	-10.254	6.001	.122	-1.751	2.089
.254	.729	.078	.267	.705	-.707	.469	1.289	4.083	.208	8.630	6.417
.350	.377	5.664	.502	.705	3.993	.676	15.471	5.322	.641	-.306	4.442
.428	.492	5.389	.318	.808	-.806	.359	5.536	2.115	.498	1.432	6.087
.320	.245	.950	.565	.734	1.075	.533	7.906	4.903	.240	5.183	4.199
.310	.579	4.802	.334	.632	1.971	.315	21.662	4.255	.236	7.923	10.546
.367	.588	-1.079	.247	.426	.613	.530	-6.048	5.597	.631	2.793	10.157
.636	.825	3.055	.332	.781	4.192	.839	12.770	4.393	.138	3.366	5.293
.658	.686	8.680	.371	.774	.986	.187	13.399	6.645	.209	-.707	6.626
.675	.733	6.764	.315	.687	.318	.287	3.475	5.654	.471	7.051	8.755
.827	.655	3.274	.695	.537	-.919	.384	3.751	1.534	.269	-3.519	6.734
.319	.399	3.889	.268	.908	2.702	.530	3.161	6.370	.380	-3.644	6.009
.556	.824	-1.369	.400	.902	.679	.327	5.969	3.684	.316	-1.800	6.654
.381	.344	-2.680	.230	.767	3.030	.335	-3.692	3.689	.189	5.951	6.529
.121	.555	2.141	.372	.410	.420	.563	-13.592	5.493	.286	4.134	6.615
.572	.604	1.326	.294	.371	.404	.630	3.734	5.306	.275	-4.526	7.053
.315	.767	8.489	.592	.358	-1.610	.873	1.161	3.388	.191	.573	7.599
.529	.527	-1.121	.178	.818	2.302	.318	2.453	3.316	.309	2.282	5.659
.210	.609	11.658	.354	.653	2.721	.499	8.449	6.267	.090	9.104	9.125
.420	.803	2.574	.478	.391	1.743	.474	4.383	1.944	.490	8.791	6.237
.157	.651	3.121	.705	.614	7.242	.592	5.728	2.338	.261	-.252	5.388

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