Appendix A

Distribution Tables

Binomial Distribution

$$B_{n,p}(x) = \sum_{i=0}^{\lfloor x \rfloor} \binom{n}{i} p^i (1-p)^{n-i}$$

n=1	p=0.01	0.05	0.1	0.15	1/6	0.2	0.25	0.3	1/3	0.4	0.5
x=0	0.99	0.95	0.9	0.85	0.8333333	0.8	0.75	0.7	0.6666667	0.6	0.5

n=2	p=0.01	0.05	0.1	0.15	1/6	0.2	0.25	0.3	1/3	0.4	0.5
x=0	0.9801	0.9025	0.81	0.7225	0.6944444	0.64	0.5625	0.49	0.4444444	0.36	0.25
1	0.9999	0.9975	0.99	0.9775	0.9722222	0.96	0.9375	0.91	0.8888889	0.84	0.75

n=3	p=0.01	0.05	0.1	0.15	1/6	0.2	0.25	0.3	1/3	0.4	0.5
x=0	0.970299	0.857375	0.729	0.614125	0.5787037	0.512	0.421875	0.343	0.2962963	0.216	0.125
1	0.999702	0.992750	0.972	0.939250	0.9259259	0.896	0.843750	0.784	0.7407407	0.648	0.500
2	0.999999	0.999875	0.999	0.996625	0.9953704	0.992	0.984375	0.973	0.9629630	0.936	0.875

n=4	p=0.01	0.05	0.1	0.15	1/6	0.2	0.25	0.3	1/3	0.4	0.5
x=0	0.960596	0.8145062	0.6561	0.5220063	0.4822531	0.4096	0.3164063	0.2401	0.1975309	0.1296	0.0625
1	0.999408	0.9859812	0.9477	0.8904813	0.8680556	0.8192	0.7382812	0.6517	0.5925926	0.4752	0.3125
2	0.999996	0.9995188	0.9963	0.9880187	0.9837963	0.9728	0.9492188	0.9163	0.8888889	0.8208	0.6875
3	1.000000	0.9999938	0.9999	0.9994937	0.9992284	0.9984	0.9960938	0.9919	0.9876543	0.9744	0.9375

n=5	p=0.01	0.05	0.1	0.15	1/6	0.2	0.25	0.3	1/3	0.4	0.5
x=0	0.9509900	0.7737809	0.59049	0.4437053	0.4018776	0.32768	0.2373047	0.16807	0.1316872	0.07776	0.03125
1	0.9990199	0.9774075	0.91854	0.8352100	0.8037551	0.73728	0.6328125	0.52822	0.4609053	0.33696	0.18750
2	0.9999901	0.9988419	0.99144	0.9733881	0.9645062	0.94208	0.8964844	0.83692	0.7901235	0.68256	0.50000
3	1.0000000	0.9999700	0.99954	0.9977725	0.9966564	0.99328	0.9843750	0.96922	0.9547325	0.91296	0.81250
4	1.0000000	0.9999997	0.99999	0.9999241	0.9998714	0.99968	0.9990234	0.99757	0.9958848	0.98976	0.96875

n=6	p=0.01	0.05	0.1	0.15	1/6	0.2	0.25	0.3	1/3	0.4	0.5
x=0	0.9414801	0.7350919	0.531441	0.3771495	0.3348980	0.262144	0.1779785	0.117649	0.0877915	0.046656	0.015625
1	0.9985396	0.9672262	0.885735	0.7764843	0.7367755	0.655360	0.5339355	0.420175	0.3511660	0.233280	0.109375
2	0.9999804	0.9977702	0.984150	0.9526614	0.9377143	0.901120	0.8305664	0.744310	0.6803841	0.544320	0.343750
3	0.9999999	0.9999136	0.998730	0.9941148	0.9912980	0.983040	0.9624023	0.929530	0.8998628	0.820800	0.656250
4	1.0000000	0.9999982	0.999945	0.9996013	0.9993356	0.998400	0.9953613	0.989065	0.9821674	0.959040	0.890625
5	1.0000000	1.0000000	0.999999	0.9999886	0.9999786	0.999936	0.9997559	0.999271	0.9986283	0.995904	0.984375

n=7	p=0.01	0.05	0.1	0.15	1/6	0.2	0.25	0.3	1/3	0.4	0.5
x=0	0.9320653	0.6983373	0.4782969	0.3205771	0.2790816	0.2097152	0.1334839	0.0823543	0.05852766	0.0279936	0.0078125
1	0.9979690	0.9556195	0.8503056	0.7165841	0.6697960	0.5767168	0.4449463	0.3294172	0.26337449	0.1586304	0.0625000
2	0.9999660	0.9962430	0.9743085	0.9262348	0.9042245	0.8519680	0.7564087	0.6470695	0.57064472	0.4199040	0.2265625
3	0.9999997	0.9998064	0.9972720	0.9878968	0.9823674	0.9666560	0.9294434	0.8739640	0.82670325	0.7102080	0.5000000
4	1.0000000	0.9999940	0.9998235	0.9987784	0.9979960	0.9953280	0.9871216	0.9712045	0.95473251	0.9037440	0.7734375
5	1.0000000	0.9999999	0.9999936	0.9999305	0.9998714	0.9996288	0.9986572	0.9962092	0.99314129	0.9811584	0.9375000
6	1.0000000	1.0000000	0.9999999	0.9999983	0.9999964	0.9999872	0.9999390	0.9997813	0.99954275	0.9983616	0.9921875

n=8	p=0.01	0.05	0.1	0.15	1/6	0.2	0.25	0.3	1/3	0.4	0.5
x=0	0.9227447	0.6634204	0.4304672	0.2724905	0.2325680	0.1677722	0.1001129	0.05764801	0.03901844	0.01679616	0.00390625
1	0.9973099	0.9427553	0.8131047	0.6571830	0.6046769	0.5033165	0.3670807	0.25529833	0.19509221	0.10637568	0.03515625
2	0.9999461	0.9942118	0.9619082	0.8947872	0.8651531	0.7969178	0.6785431	0.55177381	0.46822131	0.31539456	0.14453125
3	0.9999993	0.9996282	0.9949756	0.9786475	0.9693436	0.9437184	0.8861847	0.80589565	0.74135040	0.59408640	0.36328125
4	1.0000000	0.9999846	0.9995683	0.9971461	0.9953912	0.9895936	0.9727020	0.94203235	0.91205609	0.82632960	0.63671875
5	1.0000000	0.9999996	0.9999766	0.9997577	0.9995588	0.9987686	0.9957733	0.98870779	0.98033836	0.95019264	0.85546875
6	1.0000000	1.0000000	0.9999993	0.9999881	0.9999756	0.9999155	0.9996185	0.99870967	0.99740893	0.99148032	0.96484375
7	1.0000000	1.0000000	1.0000000	0.9999997	0.9999994	0.9999974	0.9999847	0.99993439	0.99984758	0.99934464	0.99609375

n=9	p=0.01	0.05	0.1	0.15	1/6	0.2	0.25	0.3	1/3	0.4	0.5
x=0	0.9135172	0.6302494	0.3874205	0.2316169	0.1938067	0.1342177	0.07508469	0.04035361	0.02601229	0.01007770	0.00195313
1	0.9965643	0.9287886	0.7748410	0.5994792	0.5426588	0.4362076	0.30033875	0.19600323	0.14306762	0.07054387	0.01953125
2	0.9999197	0.9916390	0.9470279	0.8591466	0.8217404	0.7381975	0.60067749	0.46283117	0.37717828	0.23178701	0.08984375
3	0.9999988	0.9993574	0.9916689	0.9660685	0.9519785	0.9143583	0.83427429	0.72965910	0.65030737	0.48260966	0.25390625
4	1.0000000	0.9999668	0.9991091	0.9943713	0.9910499	0.9804186	0.95107269	0.90119134	0.85515419	0.73343232	0.50000000
5	1.0000000	0.9999988	0.9999358	0.9993660	0.9988642	0.9969336	0.99000549	0.97470516	0.95757761	0.90064742	0.74609375
6	1.0000000	1.0000000	0.9999970	0.9999536	0.9999061	0.9996861	0.99865723	0.99570911	0.99171874	0.97496525	0.91015625
7	1.0000000	1.0000000	0.9999999	0.9999980	0.9999954	0.9999811	0.99989319	0.99956697	0.99903470	0.99619891	0.98046875
8	1.0000000	1.0000000	1.0000000	1.0000000	0.9999999	0.9999995	0.99999619	0.99998032	0.99994919	0.99973786	0.99804688

n=10	p=0.01	0.05	0.1	0.15	1/6	0.2	0.25	0.3	1/3	0.4	0.5
x=0	0.9043821	0.5987369	0.3486784	0.1968744	0.1615056	0.1073742	0.05631351	0.02824752	0.01734153	0.00604662	0.00097656
1	0.9957338	0.9138616	0.7360989	0.5442998	0.4845167	0.3758096	0.24402523	0.14930835	0.10404918	0.04635740	0.01074219
2	0.9998862	0.9884964	0.9298092	0.8201965	0.7752268	0.6777995	0.52559280	0.38278279	0.29914139	0.16728975	0.05468750
3	0.9999980	0.9989715	0.9872048	0.9500302	0.9302722	0.8791261	0.77587509	0.64961072	0.55926434	0.38228060	0.17187500
4	1.0000000	0.9999363	0.9983651	0.9901259	0.9845380	0.9672065	0.92187309	0.84973167	0.78687192	0.63310326	0.37695313
5	1.0000000	0.9999972	0.9998531	0.9986168	0.9975618	0.9936306	0.98027229	0.95265101	0.92343647	0.83376138	0.62304688
6	1.0000000	0.9999999	0.9999909	0.9998654	0.9997325	0.9991356	0.99649429	0.98940792	0.98033836	0.94523812	0.82812500
7	1.0000000	1.0000000	0.9999996	0.9999913	0.9999806	0.9999221	0.99958420	0.99840961	0.99659605	0.98770545	0.94531250
8	1.0000000	1.0000000	1.0000000	0.9999997	0.9999992	0.9999958	0.99997044	0.99985631	0.99964436	0.99832228	0.98925781
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	0.9999999	0.99999905	0.99999410	0.99998306	0.99989514	0.99902344

n=11	p=0.01	0.05	0.1	0.15	1/6	0.2	0.25	0.3	1/3	0.4	0.5
x=0	0.8953383	0.5688001	0.3138106	0.1673432	0.1345880	0.08589935	0.04223514	0.01977327	0.01156102	0.00362797	0.00048828
1	0.9948203	0.8981054	0.6973569	0.4921860	0.4306816	0.32212255	0.19709730	0.11299010	0.07514663	0.03023309	0.00585938
2	0.9998446	0.9847647	0.9104381	0.7788120	0.7267751	0.61740155	0.45520091	0.31274045	0.23411065	0.11891681	0.03271484
3	0.9999969	0.9984477	0.9814652	0.9305551	0.9044313	0.83886080	0.71330452	0.56956234	0.47255669	0.29628426	0.11328125
4	1.0000000	0.9998881	0.9972490	0.9841116	0.9754937	0.94959043	0.88537359	0.78969538	0.71100273	0.53277420	0.27441406
5	1.0000000	0.9999942	0.9997043	0.9973431	0.9953912	0.98834579	0.96567249	0.92177521	0.87791495	0.75349813	0.50000000
6	1.0000000	0.9999998	0.9999771	0.9996781	0.9993707	0.99803464	0.99243879	0.97838085	0.96137106	0.90064742	0.72558594
7	1.0000000	1.0000000	0.9999988	0.9999724	0.9999392	0.99976479	0.99881172	0.99570911	0.99117682	0.97071852	0.88671875
8	1.0000000	1.0000000	1.0000000	0.9999984	0.9999961	0.99998106	0.99987388	0.99942230	0.99862826	0.99407555	0.96728516
9	1.0000000	1.0000000	1.0000000	0.9999999	0.9999998	0.99999908	0.99999189	0.99995276	0.99987016	0.99926600	0.99414063
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	0.99999998	0.99999976	0.99999823	0.99999435	0.99995806	0.99951172

n=12	p=0.01	0.05	0.1	0.15	1/6	0.2	0.25	0.3	1/3	0.4	0.5
x=0	0.8863849	0.5403601	0.2824295	0.1422418	0.1121567	0.06871948	0.03167635	0.01384129	0.00770735	0.00217678	0.00024414
1	0.9938255	0.8816401	0.6590023	0.4434596	0.3813326	0.27487791	0.15838176	0.08502505	0.05395143	0.01959104	0.00317383
2	0.9997944	0.9804317	0.8891300	0.7358181	0.6774262	0.55834575	0.39067501	0.25281535	0.18112265	0.08344332	0.01928711
3	0.9999954	0.9977636	0.9743625	0.9077937	0.8748219	0.79456895	0.64877862	0.49251577	0.39307468	0.22533728	0.07299805
4	0.9999999	0.9998161	0.9956707	0.9760781	0.9636500	0.92744450	0.84235632	0.72365547	0.63152071	0.43817822	0.19384766
5	1.0000000	0.9999889	0.9994588	0.9953584	0.9920750	0.98059472	0.94559777	0.88215126	0.82227754	0.66520856	0.38720703
6	1.0000000	0.9999995	0.9999498	0.9993279	0.9987075	0.99609687	0.98574722	0.96139916	0.93355236	0.84178771	0.61279297
7	1.0000000	1.0000000	0.9999966	0.9999283	0.9998445	0.99941876	0.99721849	0.99051063	0.98124157	0.94269008	0.80615234
8	1.0000000	1.0000000	0.9999998	0.9999945	0.9999866	0.99993780	0.99960834	0.99830834	0.99614445	0.98473273	0.92700195
9	1.0000000	1.0000000	1.0000000	0.9999997	0.9999992	0.99999547	0.99996239	0.99979362	0.99945620	0.99718982	0.98071289
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	0.99999980	0.99999779	0.99998459	0.99995296	0.99968123	0.99682617
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.00000000	0.99999994	0.99999947	0.99999812	0.99998322	0.99975586

n=13	p=0.01	0.05	0.1	0.15	1/6	0.2	0.25	0.3	1/3	0.4	0.5
x=0	0.8775210	0.5133421	0.2541866	0.1209055	0.09346388	0.05497558	0.02375726	0.00968890	0.00513823	0.00130607	0.00012207
1	0.9927511	0.8645761	0.6213450	0.3982769	0.33646996	0.23364622	0.12670541	0.06366992	0.03853673	0.01262534	0.00170898
2	0.9997347	0.9754922	0.8661172	0.6919643	0.62807727	0.50165218	0.33260170	0.20247826	0.13873224	0.05790241	0.01123047
3	0.9999933	0.9968970	0.9658393	0.8819973	0.84192262	0.74732431	0.58425272	0.42060565	0.32242400	0.16857970	0.04614258
4	0.9999999	0.9997134	0.9935398	0.9658354	0.94884530	0.90086939	0.79396190	0.65431356	0.55203870	0.35304185	0.13342285
5	1.0000000	0.9999803	0.9990800	0.9924664	0.98733746	0.96996468	0.91978741	0.83460252	0.75869193	0.57439642	0.29052734
6	1.0000000	0.9999990	0.9999007	0.9987325	0.99760204	0.99299644	0.97570986	0.93762479	0.89646076	0.77115605	0.50000000
7	1.0000000	1.0000000	0.9999919	0.9998382	0.99965496	0.99875438	0.99435067	0.98177719	0.96534517	0.90232913	0.70947266
8	1.0000000	1.0000000	0.9999995	0.9999846	0.99996289	0.99983399	0.99901088	0.99596903	0.99117682	0.96791567	0.86657715
9	1.0000000	1.0000000	1.0000000	0.9999989	0.99999711	0.99998394	0.99987388	0.99934804	0.99835228	0.99220698	0.95385742
10	1.0000000	1.0000000	1.0000000	0.9999999	0.99999985	0.99999893	0.99998894	0.99992730	0.99978737	0.99868467	0.98876953
11	1.0000000	1.0000000	1.0000000	1.0000000	0.99999999	0.99999996	0.99999940	0.99999500	0.99998307	0.99986243	0.99829102
12	1.0000000	1.0000000	1.0000000	1.0000000	1.00000000	1.00000000	0.99999999	0.99999984	0.99999937	0.99999329	0.99987793

n=14	p=0.01	0.05	0.1	0.15	1/6	0.2	0.25	0.3	1/3	0.4	0.5
x=0	0.8687458	0.4876750	0.2287679	0.1027697	0.07788657	0.04398047	0.01781795	0.00678223	0.00342549	0.00078364	6.1035e-05
1	0.9915988	0.8470144	0.5846291	0.3566712	0.29596895	0.19791209	0.10096837	0.04747562	0.02740390	0.00809763	9.1553e-04
2	0.9996649	0.9699464	0.8416400	0.6479112	0.57947605	0.44805099	0.28112762	0.16083576	0.10533374	0.03979158	6.4697e-03
3	0.9999908	0.9958268	0.9558671	0.8534924	0.80628173	0.69818988	0.52133996	0.35516743	0.26119341	0.12430878	2.8687e-02
4	0.9999998	0.9995726	0.9907698	0.9532597	0.93102485	0.87016037	0.74153460	0.58420119	0.47550047	0.27925699	8.9783e-02
5	1.0000000	0.9999669	0.9985259	0.9884717	0.98092210	0.95614562	0.88833103	0.78051584	0.68980752	0.48585459	2.1198e-01
6	1.0000000	0.9999980	0.9998186	0.9977925	0.99589128	0.98839009	0.96172924	0.90671811	0.85053781	0.69245220	3.9526e-01
7	1.0000000	0.9999999	0.9999828	0.9996724	0.99931280	0.99760279	0.98969047	0.96853147	0.94238370	0.84985990	6.0474e-01
8	1.0000000	1.0000000	0.9999987	0.9999626	0.99991157	0.99961807	0.99784582	0.99171148	0.98256627	0.94168106	7.8802e-01
9	1.0000000	1.0000000	0.9999999	0.9999968	0.99999141	0.99995395	0.99965813	0.99833434	0.99596046	0.98249046	9.1022e-01
10	1.0000000	1.0000000	1.0000000	0.9999998	0.99999939	0.99999594	0.99996018	0.99975352	0.99930901	0.99609359	9.7131e-01
11	1.0000000	1.0000000	1.0000000	1.0000000	0.99999997	0.99999975	0.99999679	0.99997469	0.99991783	0.99939132	9.9353e-01
12	1.0000000	1.0000000	1.0000000	1.0000000	1.00000000	0.99999999	0.99999984	0.99999839	0.99999394	0.99994094	9.9908e-01
13	1.0000000	1.0000000	1.0000000	1.0000000	1.00000000	1.00000000	1.00000000	0.99999995	0.99999979	0.99999732	9.9994e-01

n=15	p=0.01	0.05	0.1	0.15	1/6	0.2	0.25	0.3	1/3	0.4	0.5
x=0	0.8600584	0.4632912	0.2058911	0.08735422	0.06490547	0.03518437	0.01336346	0.00474756	0.00228366	0.00047019	3.0518e-05
1	0.9903702	0.8290475	0.5490430	0.31858598	0.25962189	0.16712577	0.08018077	0.03526760	0.01941110	0.00517204	4.8828e-04
2	0.9995842	0.9637998	0.8159389	0.60422520	0.53222487	0.39802321	0.23608781	0.12682772	0.07935713	0.02711400	3.6926e-03
3	0.9999875	0.9945327	0.9444444	0.82265520	0.76848078	0.64816210	0.46128688	0.29686793	0.20924019	0.09050190	1.7578e-02
4	0.9999997	0.9993853	0.9872795	0.93829461	0.91023433	0.83576628	0.68648594	0.51549106	0.40406478	0.21727771	5.9235e-02
5	1.0000000	0.9999472	0.9977503	0.98318991	0.97260589	0.93894857	0.85163192	0.72162144	0.61837184	0.40321555	1.5088e-01
6	1.0000000	0.9999965	0.9996894	0.99639441	0.99339642	0.98194119	0.94337969	0.86885743	0.79696105	0.60981316	3.0362e-01
7	1.0000000	0.9999998	0.9999664	0.99939039	0.99874255	0.99576025	0.98270016	0.94998746	0.91176840	0.78689682	5.0000e-01
8	1.0000000	1.0000000	0.9999972	0.99991910	0.99981178	0.99921501	0.99580699	0.98475747	0.96917208	0.90495259	6.9638e-01
9	1.0000000	1.0000000	0.9999998	0.99999166	0.99997810	0.99988677	0.99920505	0.99634748	0.99149573	0.96616670	8.4912e-01
10	1.0000000	1.0000000	1.0000000	0.99999935	0.99999806	0.99998754	0.99988466	0.99932777	0.99819282	0.99065234	9.4077e-01
11	1.0000000	1.0000000	1.0000000	0.99999996	0.99999987	0.99999899	0.99998764	0.99990834	0.99971489	0.99807223	9.8242e-01
12	1.0000000	1.0000000	1.0000000	1.00000000	0.99999999	0.99999994	0.99999908	0.99999128	0.99996857	0.99972110	9.9631e-01
13	1.0000000	1.0000000	1.0000000	1.00000000	1.00000000	1.00000000	0.99999996	0.99999948	0.99999784	0.99997477	9.9951e-01
14	1.0000000	1.0000000	1.0000000	1.00000000	1.00000000	1.00000000	1.00000000	0.99999999	0.99999993	0.99999893	9.9997e-01

n=16	p=0.01	0.05	0.1	0.15	1/6	0.2	0.25	0.3	1/3	0.4	0.5
x=0	0.8514578	0.4401267	0.1853020	0.07425109	0.05408789	0.0281475	0.01002260	0.00332329	0.00152244	0.00028211	1.5259e-05
1	0.9890671	0.8107597	0.5147278	0.28390121	0.22716915	0.1407375	0.06347644	0.02611159	0.01370195	0.00329130	2.5940e-04
2	0.9994921	0.9570621	0.7892493	0.56137932	0.48679104	0.3518437	0.19711105	0.09935968	0.05937512	0.01833721	2.0905e-03
3	0.9999835	0.9929961	0.9315938	0.78989070	0.72910480	0.5981343	0.40498711	0.24585586	0.16594583	0.06514674	1.0635e-02
4	0.9999996	0.9991427	0.9829960	0.92094870	0.88660874	0.7982454	0.63018618	0.44990412	0.33912325	0.16656738	3.8406e-02
5	1.0000000	0.9999191	0.9967032	0.97645562	0.96221063	0.9183121	0.81034543	0.65978233	0.54693615	0.32884041	1.0506e-01
6	1.0000000	0.9999940	0.9994955	0.99441374	0.98993133	0.9733427	0.92044275	0.82468663	0.73743131	0.52717411	2.2725e-01
7	1.0000000	0.9999997	0.9999387	0.99894100	0.99785153	0.9929964	0.97287004	0.92564845	0.87349929	0.71606335	4.0181e-01
8	1.0000000	1.0000000	0.9999941	0.99983979	0.99963357	0.9985241	0.99253028	0.97432647	0.95003752	0.85773028	5.9819e-01
9	1.0000000	1.0000000	0.9999995	0.99998078	0.99995038	0.9997524	0.99835553	0.99287048	0.98405451	0.94168106	7.7275e-01
10	1.0000000	1.0000000	1.0000000	0.99999819	0.99999473	0.9999674	0.99971476	0.99843368	0.99596046	0.98085808	8.9494e-01
11	1.0000000	1.0000000	1.0000000	0.99999987	0.99999957	0.9999967	0.99996189	0.99973417	0.99920754	0.99510427	9.6159e-01
12	1.0000000	1.0000000	1.0000000	0.99999999	0.99999997	0.9999998	0.99999622	0.99996640	0.99988401	0.99906155	9.8936e-01
13	1.0000000	1.0000000	1.0000000	1.00000000	1.00000000	1.0000000	0.99999974	0.99999702	0.99998808	0.99987330	9.9791e-01
14	1.0000000	1.0000000	1.0000000	1.00000000	1.00000000	1.0000000	0.99999999	0.99999984	0.99999923	0.99998926	9.9974e-01
15	1.0000000	1.0000000	1.0000000	1.00000000	1.00000000	1.0000000	1.00000000	1.00000000	0.99999998	0.99999957	9.9998e-01

n=17	p=0.01	0.05	0.1	0.15	1/6	0.2	0.25	0.3	1/3	0.4	0.5
x=0	0.8429432	0.4181203	0.1667718	0.06311342	0.04507324	0.0225180	0.00751695	0.00232631	0.00101496	0.00016927	7.6294e-06
1	0.9876910	0.7922280	0.4817852	0.25245369	0.19832227	0.1182195	0.05011298	0.01927510	0.00964211	0.00208762	1.3733e-04
2	0.9993878	0.9497470	0.7617972	0.51975760	0.44352072	0.3096225	0.16370240	0.07738525	0.04415073	0.01231885	1.1749e-03
3	0.9999786	0.9911994	0.9173594	0.75561400	0.68871917	0.5488762	0.35301810	0.20190701	0.13042226	0.04642293	6.3629e-03
4	0.9999994	0.9988354	0.9778558	0.90129000	0.86035808	0.7582232	0.57388641	0.38868964	0.28139745	0.12599913	2.4521e-02
5	1.0000000	0.9998803	0.9953325	0.96812958	0.94961032	0.8942988	0.76530561	0.59681886	0.47766519	0.26393120	7.1732e-02
6	1.0000000	0.9999903	0.9992162	0.99172002	0.98531121	0.9623366	0.89291842	0.77521534	0.67393293	0.44784063	1.6615e-01
7	1.0000000	0.9999994	0.9998944	0.99826191	0.99653149	0.9890657	0.95976322	0.89535990	0.82814329	0.64050766	3.1453e-01
8	1.0000000	1.0000000	0.9999885	0.99970497	0.99933656	0.9974185	0.98761522	0.95972306	0.92452477	0.80106351	5.0000e-01
9	1.0000000	1.0000000	0.9999990	0.99995963	0.99989758	0.9995068	0.99689922	0.98730728	0.97271551	0.90810075	6.8547e-01
10	1.0000000	1.0000000	0.9999999	0.99999558	0.99998734	0.9999244	0.99937495	0.99676472	0.99199181	0.96518727	8.3385e-01
11	1.0000000	1.0000000	1.0000000	0.99999962	0.99999876	0.9999908	0.99990011	0.99934402	0.99812518	0.98940580	9.2827e-01
12	1.0000000	1.0000000	1.0000000	0.99999997	0.99999991	0.9999991	0.99998764	0.99989673	0.99965852	0.99747864	9.7548e-01
13	1.0000000	1.0000000	1.0000000	1.00000000	0.99999999	0.9999999	0.99999886	0.99998784	0.99995339	0.99954860	9.9364e-01
14	1.0000000	1.0000000	1.0000000	1.00000000	1.00000000	1.0000000	0.99999993	0.99999899	0.99999552	0.99994288	9.9883e-01
15	1.0000000	1.0000000	1.0000000	1.00000000	1.00000000	1.0000000	1.00000000	0.99999995	0.99999973	0.99999545	9.9986e-01
16	1.0000000	1.0000000	1.0000000	1.00000000	1.00000000	1.0000000	1.00000000	1.00000000	0.99999999	0.99999983	9.9999e-01

A.1 Poisson Distribution

$$Po_\lambda(x) = \sum_{k=0}^{\lfloor x \rfloor} e^{-\lambda} \frac{\lambda^k}{k!}$$

x	λ =0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
0	0.9048374	0.8187308	0.7408182	0.6703200	0.6065307	0.5488116	0.4965853	0.4493290	0.4065697	0.3678794
1	0.9953212	0.9824769	0.9630637	0.9384481	0.9097960	0.8780986	0.8441950	0.8087921	0.7724824	0.7357589
2	0.9998453	0.9988515	0.9964005	0.9920737	0.9856123	0.9768847	0.9658584	0.9525774	0.9371431	0.9196986
3	0.9999962	0.9999432	0.9997342	0.9992237	0.9982484	0.9966419	0.9942465	0.9909201	0.9865413	0.9810118
4	0.9999999	0.9999977	0.9999842	0.9999388	0.9998279	0.9996055	0.9992145	0.9985887	0.9976559	0.9963402
5	1.0000000	0.9999999	0.9999992	0.9999960	0.9999858	0.9999611	0.9999100	0.9998157	0.9996565	0.9994058
6		1.0000000	1.0000000	0.9999998	0.9999990	0.9999967	0.9999911	0.9999793	0.9999566	0.9999168
7				1.0000000	0.9999999	0.9999998	0.9999992	0.9999979	0.9999952	0.9999898
8					1.0000000	1.0000000	0.9999999	0.9999998	0.9999995	0.9999989
9							1.0000000	1.0000000	1.0000000	0.9999999
10										1.0000000

x	λ =1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
0	0.3328711	0.3011942	0.2725318	0.2465970	0.2231302	0.2018965	0.1826835	0.1652989	0.1495686	0.1353353
1	0.6990293	0.6626273	0.6268231	0.5918327	0.5578254	0.5249309	0.4932455	0.4628369	0.4337490	0.4060058
2	0.9004163	0.8794871	0.8571125	0.8334977	0.8088468	0.7833585	0.7572232	0.7306211	0.7037204	0.6766764
3	0.9742582	0.9662310	0.9569045	0.9462747	0.9343575	0.9211865	0.9068106	0.8912916	0.8747022	0.8571235
4	0.9945647	0.9922542	0.9893370	0.9857467	0.9814241	0.9763177	0.9703852	0.9635933	0.9559186	0.9473470
5	0.9990321	0.9984998	0.9977694	0.9967989	0.9955440	0.9939597	0.9920006	0.9896220	0.9867808	0.9834364
6	0.9998512	0.9997489	0.9995964	0.9993777	0.9990740	0.9986642	0.9981249	0.9974306	0.9965539	0.9954662
7	0.9999799	0.9999630	0.9999357	0.9998935	0.9998304	0.9997396	0.9996123	0.9994385	0.9992065	0.9989033
8	0.9999976	0.9999951	0.9999909	0.9999837	0.9999723	0.9999546	0.9999283	0.9998903	0.9998366	0.9997626
9	0.9999997	0.9999994	0.9999988	0.9999978	0.9999959	0.9999929	0.9999880	0.9999806	0.9999696	0.9999535
10	1.0000000	0.9999999	0.9999999	0.9999997	0.9999994	0.9999990	0.9999982	0.9999969	0.9999948	0.9999917
11		1.0000000	1.0000000	1.0000000	0.9999999	0.9999999	0.9999997	0.9999995	0.9999992	0.9999986
12					1.0000000	1.0000000	1.0000000	0.9999999	0.9999999	0.9999998
13								1.0000000	1.0000000	1.0000000

x	λ =2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
0	0.1224564	0.1108032	0.1002588	0.09071795	0.0820850	0.07427358	0.06720551	0.06081006	0.05502322	0.04978707
1	0.3796149	0.3545701	0.3308542	0.30844104	0.2872975	0.26738488	0.24866040	0.23107824	0.21459056	0.19914827
2	0.6496314	0.6227137	0.5960388	0.56970875	0.5438131	0.51842958	0.49362449	0.46945368	0.44596320	0.42319008
3	0.8386428	0.8193524	0.7993471	0.77872291	0.7575761	0.73600164	0.71409218	0.69193743	0.66962342	0.64723189
4	0.9378739	0.9275037	0.9162493	0.90413141	0.8911780	0.87742349	0.86290786	0.84767606	0.83177708	0.81526324
5	0.9795509	0.9750902	0.9700243	0.96432749	0.9579790	0.95096285	0.94326833	0.93488969	0.92582620	0.91608206
6	0.9941379	0.9925387	0.9906381	0.98840592	0.9858127	0.98282990	0.97943055	0.97558938	0.97128327	0.96649146
7	0.9985140	0.9980224	0.9974112	0.99666138	0.9957533	0.99466624	0.99337883	0.99186926	0.99011549	0.98809550
8	0.9996627	0.9995305	0.9993584	0.99913802	0.9988597	0.99851305	0.99808637	0.99756722	0.99694217	0.99619701
9	0.9999307	0.9998991	0.9998561	0.99979846	0.9997226	0.99962435	0.99949864	0.99933991	0.99914188	0.99889751
10	0.9999870	0.9999802	0.9999705	0.99995696	0.9999384	0.99991329	0.99987995	0.99983627	0.99977979	0.99970766
11	0.9999978	0.9999964	0.9999944	0.99999155	0.9999874	0.99998158	0.99997354	0.99996261	0.99994797	0.99992861
12	0.9999996	0.9999994	0.9999990	0.99999846	0.9999976	0.99999638	0.99999460	0.99999209	0.99998861	0.99998385
13	0.9999999	0.9999999	0.9999998	0.99999974	0.9999996	0.99999934	0.99999897	0.99999844	0.99999768	0.99999660
14	1.00000000	1.0000000	1.0000000	0.99999996	0.9999999	0.99999989	0.99999982	0.99999971	0.99999956	0.99999933
15				1.00000000	1.0000000	0.99999998	0.99999997	0.99999995	0.99999992	0.99999988
16						1.00000000	1.00000000	0.99999999	0.99999999	0.99999998
17								1.00000000	1.00000000	1.00000000

x	λ =3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
0	0.03019738	0.01831564	0.01110900	0.00673795	0.00408677	0.00247875	0.00150344	0.00091188	0.00055308	0.00033546
1	0.13588823	0.09157819	0.06109948	0.04042768	0.02656401	0.01735127	0.01127579	0.00729506	0.00470122	0.00301916
2	0.32084720	0.23810331	0.17357807	0.12465202	0.08837643	0.06196880	0.04303595	0.02963616	0.02025672	0.01375397
3	0.53663267	0.43347012	0.34229596	0.26502592	0.20169920	0.15120388	0.11184961	0.08176542	0.05914546	0.04238011
4	0.72544495	0.62883694	0.53210358	0.44049329	0.35751800	0.28505650	0.22367182	0.17299161	0.13206186	0.09963240
5	0.85761355	0.78513039	0.70293043	0.61596066	0.52891869	0.44567964	0.36904068	0.30070828	0.24143645	0.19123606
6	0.93471190	0.88932602	0.83105058	0.76218346	0.68603598	0.60630278	0.52652362	0.44971106	0.37815469	0.31337428
7	0.97326108	0.94886638	0.91341353	0.86662833	0.80948528	0.74397976	0.67275778	0.59871384	0.52463853	0.45296081
8	0.99012634	0.97863657	0.95974269	0.93190637	0.89435668	0.84723749	0.79157303	0.72909127	0.66196712	0.59254734
9	0.99668506	0.99186776	0.98290727	0.96817194	0.94622253	0.91607598	0.87738405	0.83049594	0.77640761	0.71662426
10	0.99898061	0.99716023	0.99333133	0.98630473	0.97474875	0.95737908	0.93316121	0.90147921	0.86223798	0.81588579
11	0.99971101	0.99908477	0.99759572	0.99454691	0.98901186	0.97990804	0.96612044	0.94665038	0.92075869	0.88807600
12	0.99992404	0.99972628	0.99919486	0.99798115	0.99554912	0.99117252	0.98397336	0.97300023	0.95733413	0.93620280
13	0.99998140	0.99992367	0.99974841	0.99930201	0.99831488	0.99637151	0.99289982	0.98718861	0.97843535	0.96581930
14	0.99999574	0.99998007	0.99992634	0.99977375	0.99940143	0.99859965	0.99704424	0.99428280	0.98973957	0.98274301
15	0.99999908	0.99999511	0.99997972	0.99993099	0.99979983	0.99949090	0.99884016	0.99759342	0.99539168	0.99176900
16	0.99999981	0.99999887	0.99999473	0.99998013	0.99993678	0.99982512	0.99956975	0.99904182	0.99804111	0.99628200
17	0.99999996	0.99999975	0.99999870	0.99999458	0.99998109	0.99994308	0.99984872	0.99963822	0.99921000	0.99840574
18	0.99999999	0.99999995	0.99999970	0.99999860	0.99999463	0.99998240	0.99994945	0.99987015	0.99969700	0.99934963
19	1.00000000	0.99999999	0.99999993	0.99999966	0.99999855	0.99999482	0.99998391	0.99995560	0.99988925	0.99974706
20		1.00000000	0.99999999	0.99999992	0.99999963	0.99999855	0.99999511	0.99998551	0.99996134	0.99990603
21			1.00000000	0.99999998	0.99999991	0.99999961	0.99999858	0.99999547	0.99998709	0.99996659
22				1.00000000	0.99999998	0.99999990	0.99999961	0.99999865	0.99999587	0.99998861
23					1.00000000	0.99999998	0.99999990	0.99999961	0.99999873	0.99999627
24						0.99999999	0.99999997	0.99999989	0.99999963	0.99999883
25						1.00000000	0.99999999	0.99999997	0.99999989	0.99999964
26							1.00000000	0.99999999	0.99999997	0.99999990
27								1.00000000	0.99999999	0.99999997
28									1.00000000	0.99999999
29										1.00000000

x	λ=9	10	11	12	13	14	15	20	25	30
0	0.00012341	0.00004540	0.00001670	0.00000614	0.00000226	0.00000083	0.00000031	0.00000000	0.00000000	0.00000000
1	0.00123410	0.00049940	0.00020042	0.00007987	0.00003164	0.00001247	0.00000489	0.00000004	0.00000000	0.00000000
2	0.00623220	0.00276940	0.00121087	0.00052226	0.00022264	0.00009396	0.00003931	0.00000046	0.00000000	0.00000000
3	0.02122649	0.01033605	0.00491587	0.00229179	0.00105030	0.00047425	0.00021138	0.00000320	0.00000004	0.00000000
4	0.05496364	0.02925269	0.01510460	0.00760039	0.00374019	0.00180525	0.00085664	0.00001694	0.00000027	0.00000000
5	0.11569052	0.06708596	0.03751981	0.02034103	0.01073389	0.00553205	0.00279243	0.00007191	0.00000140	0.00000002
6	0.20678084	0.13014140	0.07861437	0.04582231	0.02588692	0.01422792	0.00763190	0.00025512	0.00000611	0.00000012
7	0.32389696	0.22022060	0.14319153	0.08950450	0.05402825	0.03161966	0.01800219	0.00077859	0.00002292	0.00000052
8	0.45565260	0.33281970	0.23198513	0.15502780	0.09975791	0.06205520	0.03744649	0.00208726	0.00007548	0.00000205
9	0.58740824	0.45792970	0.34051064	0.24239220	0.16581190	0.10939940	0.06985366	0.00499541	0.00022148	0.00000712
10	0.70598832	0.58303980	0.45988870	0.34722940	0.25168200	0.17568120	0.11846440	0.01081172	0.00058646	0.00002235
11	0.80300838	0.69677610	0.57926676	0.46159730	0.35316490	0.26003990	0.18475180	0.02138682	0.00141597	0.00006388
12	0.87577343	0.79155650	0.68869665	0.57596520	0.46310470	0.35845840	0.26761100	0.03901199	0.00314412	0.00016770
13	0.92614923	0.86446440	0.78129117	0.68153560	0.57304460	0.46444760	0.36321780	0.06612764	0.00646748	0.00040728
14	0.95853367	0.91654150	0.85404401	0.77202450	0.67513150	0.57043670	0.46565370	0.10486430	0.01240206	0.00092068
15	0.97796434	0.95125960	0.90739609	0.84441570	0.76360690	0.66935990	0.56808960	0.15651310	0.02229302	0.00194748
16	0.98889409	0.97295840	0.94407565	0.89870900	0.83549310	0.75591770	0.66412320	0.22107420	0.03774765	0.00387273
17	0.99468043	0.98572240	0.96780948	0.93703370	0.89046500	0.82720060	0.74885880	0.29702840	0.06047504	0.00727022
18	0.99757360	0.99281350	0.98231349	0.96258350	0.93016690	0.88264290	0.81947170	0.38142190	0.09204086	0.01293270
19	0.99894405	0.99654570	0.99071054	0.97872020	0.95733130	0.92349510	0.87521880	0.47025730	0.13357480	0.02187347
20	0.99956075	0.99841170	0.99532892	0.98840230	0.97498820	0.95209160	0.91702910	0.55909260	0.18549230	0.03528462
21	0.99982505	0.99930030	0.99774808	0.99393490	0.98591860	0.97115590	0.94689360	0.64369760	0.24729880	0.05444340
22	0.99993317	0.99970430	0.99895765	0.99695260	0.99237750	0.98328780	0.96725580	0.72061130	0.31753350	0.08056902
23	0.99997548	0.99987990	0.99953614	0.99852710	0.99602820	0.99067240	0.98053540	0.78749280	0.39387550	0.11464590
24	0.99999135	0.99995310	0.99980129	0.99931440	0.99800570	0.99498010	0.98883520	0.84322740	0.47339850	0.15724200
25	0.99999706	0.99998230	0.99991795	0.99969220	0.99903400	0.99739240	0.99381510	0.88781500	0.55292140	0.20835740
26	0.99999904	0.99999360	0.99996731	0.99986670	0.99954810	0.99869130	0.99668810	0.92211320	0.62938580	0.26733660
27	0.99999969	0.99999770	0.99998742	0.99994420	0.99979570	0.99936490	0.99828420	0.94751930	0.70018610	0.33286910
28	0.99999991	0.99999920	0.99999532	0.99997740	0.99991060	0.99970160	0.99913930	0.96566650	0.76340070	0.40308250
29	0.99999997	0.99999970	0.99999831	0.99999110	0.99996210	0.99986420	0.99958160	0.97818180	0.81789610	0.47571700
30	0.99999999	0.99999990	0.99999941	0.99999660	0.99998440	0.99994010	0.99980270	0.98652530	0.86330890	0.54835150
31	1.00000000	1.00000000	0.99999980	0.99999880	0.99999380	0.99997430	0.99990970	0.99190820	0.89993210	0.61864300

x	λ=9	10	11	12	13	14	15	20	25	30
32	1.00000000	1.00000000	0.99999993	0.99999960	0.99999760	0.99998930	0.99995980	0.99527260	0.92854400	0.68454120
33			0.99999998	0.99999980	0.99999910	0.99999570	0.99998260	0.99731160	0.95021960	0.74444880
34			0.99999999	0.99999990	0.99999970	0.99999830	0.99999270	0.99851100	0.96615760	0.79730830
35			1.00000000	1.00000000	0.99999990	0.99999940	0.99999700	0.99919630	0.97754190	0.84261650
36					1.00000000	0.99999980	0.99999880	0.99957710	0.98544770	0.88037340
37						0.99999990	0.99999950	0.99978290	0.99078940	0.91098700
38						1.00000000	0.99999980	0.99989120	0.99430370	0.93515570
39							0.99999990	0.99994680	0.99655640	0.95374700
40							1.00000000	0.99997460	0.99796440	0.96769040
41								0.99998810	0.99882290	0.97789300
42								0.99999460	0.99933390	0.98518050
43								0.99999760	0.99963100	0.99026480
44								0.99999890	0.99979990	0.99373140
45								0.99999950	0.99989360	0.99604240
46								0.99999980	0.99994460	0.99754960
47								0.99999990	0.99997170	0.99851170
48								1.00000000	0.99998580	0.99911300
49									0.99999300	0.99948110
50									0.99999660	0.99970200
51									0.99999840	0.99983190
52									0.99999930	0.99990690
53									0.99999970	0.99994930
54									0.99999980	0.99997290
55									0.99999990	0.99998570
56									1.00000000	0.99999260
57										0.99999620
58										0.99999810
59										0.99999910
60										0.99999960

R commands to generate the above table:

```
ll <- seq(0.1:1,by=0.1)

poistab<-function(x){
return(ppois(x,lambda=ll))
}
t(sapply(0:10,FUN=poistab))

ll <- ll+1
t(sapply(0:13,FUN=poistab))

ll <- ll+1
t(sapply(0:17,FUN=poistab))

ll <- seq(3.5,8,by=0.5)
t(sapply(0:32,FUN=poistab))

ll <- c(9,10,11,12,13,14,15,20,25,30)
t(sapply(0:60,FUN=poistab))
```