Name: Samarth Gupta

UID: 2021600023

Subject : Design and analysis of algorithms

Experiment No.: 0

Aim : To implement various functions and study their graphs

Problem statement:

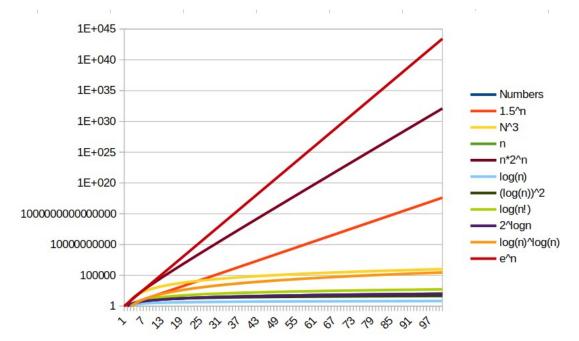
- 1) (3/2)^n
- 2) n^3
- 3) n
- 4) (n)^2n
- 5) log(n)
- 6) $(\log(n))^2$
- 7) log(n!)
- 8) 2^log(n)
- 9) $\log(n) \cdot \log(n)$
- 10) e^n
- 11) n!

Implementation in excel:

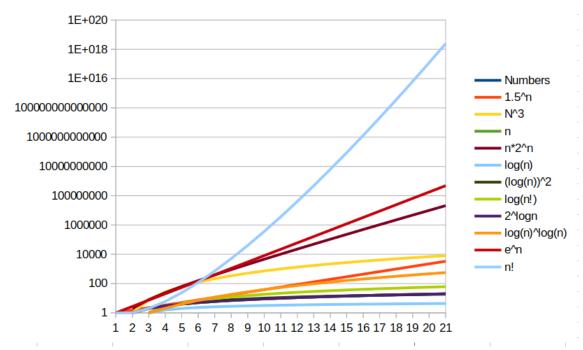
Α		В	С	D	E	F	G	н	1	J	K
Numbers	1	l.5^n	N^3	n	n*2^n	log(n)	(log(n))^2	log(n!)	2^logn	log(n)^log(n)	e^n
	0	1	() (0			i			
	1	1.5		1 1	2	0		0	0 1	L	2.718281828
	2	2.25		3	2 8	1		1	1 2	2 1	7.389056098
	3	3.375			3 24	1.5849625007	2.512106128	7 2.584962500	7 3	2.0750215003	20.08553692
	4	5.0625	64			2		4 4.584962500	7 4	1 4	54.59815003
	5	7.59375	12!			2.3219280949	5.391350077	8 6.906890595	6 5	7.0708972973	148.413159
	6	11.390625	210			2.5849625007	6.682031130	1 9.491853096	3 6	11.646053008	403.428793
	7	17.0859375	343			2.8073549221	7.881241658	4 12.29920801	8 7	18.135506687	1096.633158
	8	25.62890625	512	2 8	2048	3		9 15.29920801	8 8	3 27	2980.9579
	93	88.443359375	729	9 9	4608	3.1699250014	10.04842451	5 18.4691330	2 9	38.751428039	8103.08392
	10 5	57.665039063	1000	10	10240	3.3219280949	11.03520626	8 21.79106111	5 10	53.953651904	22026.4657
	118	36.497558594	133	1 11	22528	3.4594316186	11.96766712	4 25.25049273	3 11	73.223431307	59874.1417
	12	L29.74633789	1728	3 12	49152	3.5849625007	12.85195613	2 28.83545523	4 12	97.231404697	162754.791
	13 :	L94.61950684	219	7 13	106496	3.7004397181	13.69325410	8 32.53589495	2 13	126.70308991	442413.392
	14 2	291.92926025	274	4 14	229376	3.8073549221	14.49595150	3 36.34324987	4 14	162.41989357	1202604.28
	15	137.89389038	337	5 19	491520	3.9068905956	15.26379412	6 40.2501404	7 15	205.22012336	3269017.37
	16	556.84083557	4096	5 16	1048576	4	1	6 44.2501404	7 16	256	8886110.52
	17 9	985.26125336	4913	3 17	2228224	4.0874628413	16.70735247	9 48.33760331	1 17	315.71466717	24154952.7
	18	1477.89188	5832	2 18	4718592	4.1699250014	17.38827451	8 52.50752831	3 18	385.37919814	65659969.1
	19 2	2216.8378201	6859	9 19	9961472	4.2479275134	18.04488815	956.75545582	6 19	466.0695986	1784823
	203	3325.2567301	8000	20	20971520	4.3219280949	18.67906245	7 61.07738392	1 20	558.92380508	485165195
	21	1987.8850951	926	1 21	44040192	4.3923174228	19.29245234	2 65.46970134	4 21	665.14267898	13188157
	22	7481.8276427	10648	3 22	92274688	4.4594316186	19.88653036	1 69.92913296	2 22	785.99099582	35849128
	23 :	11222.741464	1216	7 23	192937984	4.5235619561	20.4626127	774.45269491	8 23	922.79842984	97448034
	24 :	16834.112196	1382	4 24	402653184	4.5849625007	21.02188113	3 79.03765741	9 24	1076.9605339	264891221
	25 2	25251.168294	1562	5 25	838860800	4.6438561898	21.56540031	1,83.68151360	9 25	1249.9397147	720048993
	26	37876.752441	17570	6 26	1744830464	4.7004397181	22.09413354	4 88.38195332	7 26	1443.2662035	1.9573E+
	27 5	6815.128662	19683	3 27	3623878656	4.7548875022	22.60895515	8 93.13684082	9 27	1658.5390222	5.32048E+
	28 8	35222.692992	21952	2 28	7516192768	4.8073549221	23.11066134	7 97.94419575	1 28	1897.426945	1.44626E+
	29 :	L27834.03949	24389	9 29	15569256448	4.8579809951	23.59997934	9 102.8021767	5 29	2161.6694561	3.93133E+
	30 :	191751.05923	27000	30	32212254720	4.9068905956	24.07757531	7 107.7090673	4 30	2453.077703	1.06865E+
	_	287626.58885	2979:		66571993088					2773.5354451	
	32	131439.88327	32768		1.37439E+11	5	2	5 117.6632636	5 32	3125	7.8963E+
		647159.82491	3593		2.83468E+11					3509.5031839	
		970739.73737	39304		5.84116E+11					3929.1522498	

Α	В	C	D					1	J	
	1456109.606	42875		1.20259E+12	F 5.1292830169	G 26.309544268	H 132.92440363		4386.1308215	1.58601E+1
	2184164.4091	46656	36				138.09432863		4882.6998243	
	3276246.6136	50653	37				143.303782		5421.1984117	
38	4914369.9204	54872	38	1.04454E+13	5.2479275134	27.540743186	148.55170951	38	6004.0448896	3.18559E+1
39	7371554.8806	59319	39	2.14405E+13	5.2854022189	27.935476619	153.83711173	39	6633.7376368	8.65934E+1
40	11057332.321	64000	40	4.39805E+13	5.3219280949	28.322918647	159.15903982	40	7312.8560226	2.35385E+1
41	16585998.481	68921	41	9.016E+13	5.3575520046	28.703363482	164.51659183	41	8044.0613214	6.39843E+1
42	24878997.722	74088	42	1.84718E+14	5.3923174228	29.077087188	169.90890925	42	8830.0976238	1.73927E+1
43	37318496.583	79507	43	3.78232E+14	5.4262647547	29.444349188	175.33517401	43	9673.7927461	4.72784E+1
44	55977744.875	85184	44	7.74056E+14	5.4594316186	29.805393599	180.79460562	44	10578.059136	1.28516E+1
45	83966617.312	91125	45				186.28645872		11545.894774	
46		97336					2 191.81002068		12580.384079	
47	188924889	103823					197.36460953		13684.698801	
	283387333.43	110592					202.94957203		14862.098919	
	425081000.14	117649					208.56428187		16115.933537	
	637621500.21	125000	50				214.20813806		17449.64177	
	956432250.32	132651					219.88056341		18866.753636	
52	1434648375	140608					225.58100312		20370.890943	
		148877					231.30892358		21965.76817	
54 55		157464 166375					237.06381108 242.84517079		23655.193355 25443.06897	
55 56		175616					242.84517079		25443.06897	
	10894361101	185193					254.48541573		29330.258827	
	16341541652	195112					254.46541573		31437.858091	
	24512312478	205379					266.22603977		33660.479576	
	36768468717	216000					272.13293037		36002.511074	
	55152703075	226981					278.06366771		38468.440055	
	82729054613	238328					284.01786402		41062.854536	
	1.24094E+11	250047					289.99514394		43790.443949	
64		262144		1.18059E+21			295.99514394	64		6.23515E+2
65	2.79211E+11	274625	65	2.39808E+21	6.022367813	36.268914075	302.01751175	65	49664.417537	1.69489E+2
66	4.18816E+11	287496	66	4.86994E+21	6.0443941194	36.53470027	308.06190587	66	52820.695408	4.60719E+2
,	6.28224E+11	300763	67	9.88745E+21	6.0660891905	36.797438067	314.12799506	67	56129.937324	1.25236E+2
67	0.20224LT11									
	9.42336E+11	314432	68			37.057203844	320.21545791	68	59597.352715	3.40428E+2
68 69	9.42336E+11		69	2.00701E+22 4.07304E+22	6.0874628413 6.1085244568	37.314071039	320.21545791 326.32398236 2332.45326538	69	3 59597.352715 6 63228.257587 6 67028.075382	9.25378E+2
68 69	9.42336E+11 1.4135E+12	314432 328509 343000	69 70	2.00701E+22 4.07304E+22	6.0874628413 6.1085244568	37.314071039 37.568110302	326.32398236 332.45326538	69	63228.257587	9.25378E+2
68 69 70	9.42336E+11 1.4135E+12 2.12026E+12	314432 328509	69 70 D	2.00701E+22 4.07304E+22 8.26414E+22	6.0874628413 6.1085244568 6.1292830169	37.314071039 37.568110302 G	326.32398236	69 70 I	63228.257587	9.25378E+2 2.51544E+3
68 69 70 A	9.42336E+11 1.4135E+12 2.12026E+12	314432 328509 343000	69 70 D	2.00701E+22 4.07304E+22 8.26414E+22 E 1.67644E+23	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195	37.314071039 37.568110302 G 37.819389634	326.32398236 332.45326538 H	69 70 1 71	63228.257587 67028.075382 J	9.25378E+2 2.51544E+3 K 6.83767E+3
68 69 70 A 71 72	9.42336E+11 1.4135E+12 2.12026E+12 B 3.18038E+12	314432 328509 343000 C 357911	69 70 D 71 72	2.00701E+22 4.07304E+22 8.26414E+22 E 1.67644E+23 3.4001E+23	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014	37.314071039 37.568110302 37.819389634 38.067974523	326.32398236 332.45326538 H 338.6030125	69 70 1 71 72	63228.257587 67028.075382 J 71002.337824	9.25378E+2 2.51544E+3 K 6.83767E+3 1.85867E+3
68 69 70 A 71 72 73 74	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13	314432 328509 343000 C 357911 373248 389017 405224	D 71 72 73 74	2.00701E+22 4.07304E+22 8.26414E+22 E 1.67644E+23 3.4001E+23 6.89466E+23 1.39782E+24	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656	37.314071039 37.568110302 37.819389634 38.067974523 38.31392807 38.5573111	326.32398236 332.45326538 H 338.6030125 344.7729375 350.96276206 357.17221542	1 71 72 73	63228.257587 67028.075382 71002.337824 75156.685783 79496.870115 84028.752523	9.25378E+2 2.51544E+3 4.6.83767E+3 1.85867E+3 5.05239E+3 1.37338E+3
68 69 70 A 71 72 73 74 75	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 1.61007E+13	314432 328509 343000 C 357911 373248 389017 405224 421875	D 71 72 73 74 75	2.00701E+22 4.07304E+22 8.26414E+22 E 1.67644E+23 3.4001E+23 6.89466E+23 1.39782E+24 2.83342E+24	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905	37.314071036 37.568110302 37.819389634 38.067974523 38.31392807 38.5573111 38.798182279	326.32398236 332.45326538 H 338.6030125 344.7729375 350.96276206 357.17221542 363.40103412	1 71 72 73 74	63228.257587 67028.075382 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064	9.25378E+2 2.51544E+3 4.6.83767E+3 1.85867E+3 5.05239E+3 1.37338E+3 3.73324E+3
68 69 70 A 71 72 73 74 75 76	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 1.61007E+13 2.4151E+13	314432 328509 343000 C 357911 373248 389017 405224 421875 438976	D 71 72 73 74 75 76	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+23 3.4001E+23 6.89466E+23 1.39782E+24 2.83342E+24 5.7424E+24	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134	37.314071036 37.568110302 37.819389634 38.067974523 38.31392807 38.5573111 38.798182279 39.036598213	326.32398236 332.45326538 H 338.6030125 344.7729375 350.96276206 357.17221542 363.40103412 369.64896163	1 71 72 73 74 75	63228.257587 67028.075382 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678	9.25378E+2 2.51544E+3 4.6.83767E+3 1.85867E+3 5.05239E+3 1.37338E+3 3.73324E+3 1.0148E+3
A 71 72 73 74 75 76 77	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07038E+13 1.61007E+13 2.4151E+13 3.62265E+13	314432 328509 343000 C 357911 373248 389017 405224 421875 438976 456533	D 71 72 73 74 75 76 77	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+23 3.4001E+23 6.89466E+23 1.39782E+24 5.7424E+24 1.16359E+25	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2094533656 6.2988186905 6.2479275134 6.2667865407	G 37.568110302 37.568110302 37.819389634 38.067974523 38.31392807 38.5573111 38.798182279 39.036598213 39.272613547	326.32398236 332.45326538 H 338.6030125 344.7729375 350.96276206 357.17221542 363.40103412 369.64896163 375.91574817	1 71 72 73 74 75 76	G3228.257587 G7028.075382 J 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678 98834.885678	9.25378E+2 2.51544E+3 K 6.83767E+3 1.85867E+3 5.05239E+3 1.37338E+3 1.0148E+3 2.75851E+3
A 71 72 73 74 75 76 77 78	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 2.4151E+13 3.62265E+13 5.43398E+13	314432 328509 343000 343000 c 357911 373248 389017 405224 421875 438976 456533 474552	69 70 71 71 72 73 74 75 76 77	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+23 3.4001E+23 6.89466E+23 1.39782E+24 2.83342E+24 1.16359E+25 2.35741E+25	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134 6.2667865407 6.2854022189	G 37.568110302 37.568110302 37.819389634 38.067974523 38.31392807 38.5573111 38.798182279 39.036598213 39.272613547 39.506281053	H 338.6030125 344.7729375 350.96276206 357.1722154 363.40103412 369.64896163 375.91574817 382.20115039	1 71 72 73 74 75 76 77	J 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678 98834.885678 104194.42395	9.25378E+2 2.51544E+3 4.51544E+3 8.6683767E+3 1.85867E+3 5.05239E+3 1.37332E+3 1.37332E+3 1.0148E+3 2.75851E+3 7.49842E+3
A 71 72 73 74 75 76 77 78 79	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 1.61007E+13 3.62265E+13 5.43398E+13 8.15097E+13	314432 328509 343000 c 357911 373248 389017 405224 421875 438976 456533 474552 493039	D 71 72 73 74 75 76 77 78 79	E 1.67644E+23 3.4001E+23 6.89466E+23 1.39782E+24 2.83342E+24 1.16359E+25 2.35741E+25 4.77526E+25	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134 6.2667865407 6.2854022189 6.3037807482	G 37.568110302 37.568110302 37.819389634 38.067974523 38.31392807 38.5573111 39.036598213 39.272613547 39.506281053 39.737651721	H 338.6030125 344.7729375 350.96276206 357.17221542 369.64896163 375.91574817 382.20115039 388.50493114	1 71 72 73 74 75 76 77 78	J 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678 98834.885678 104194.42395 109776.66113	8.683767E+3 1.85867E+3 5.05239E+3 1.37338E+3 3.73324E+3 2.75851E+3 7.49842E+3 2.03828E+3
A 71 72 73 74 75 76 77 88 79 80	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 1.61007E+13 2.4151E+13 3.62265E+13 8.15097E+13 1.22265E+14	314432 328509 343000 C 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000	D 71 72 73 74 75 76 77 78 79 80	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+22 8.26414E+23 3.4001E+23 6.89466E+23 1.39782E+24 5.7424E+24 1.16359E+25 2.35741E+25 4.77526E+25 9.67141E+25	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134 6.2667865407 6.2854022189 6.3037807482 6.3037807482	37.314071036 37.568110302 37.568110302 37.819389634 38.067974523 38.31392807 38.31392807 39.036598213 39.272613547 39.737651721 39.966774837	326.32398236 332.45326538 H 338.6030125 344.7729375 350.96276206 357.17221542 363.40103412 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923	1 71 72 73 74 75 76 77 78 80 80	63228.257587 67028.075382 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678 98834.885678 104194.42395 109776.66113 115588.14177	9.25378E+2 2.51544E+3 4.6.83767E+3 1.85867E+3 1.37338E+3 3.73324E+3 1.0148E+3 2.75851E+3 7.49842E+3 2.03828E+3 5.54062E+3
A 71 72 73 74 75 76 77 88 80 81	9.42336E+11 1.4135E+12 2.12026E+12 B 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 1.61007E+13 2.4151E+13 3.62265E+13 5.43398E+13 1.22265E+14 1.83397E+14	314432 328509 343000 357911 373248 389017 405224 421875 438976 456553 474552 493039 512000 531441	P 71 72 73 74 75 76 77 78 80 81	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+22 8.26414E+23 3.4001E+23 3.4001E+23 1.39782E+24 5.7424E+24 1.16359E+25 2.35741E+25 9.67141E+25 1.95846E+26	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134 6.2667865402189 6.3037807482 6.3037807482 6.3219280949 6.33398500029	37.314071036 37.568110302 37.568110302 37.819389634 38.067974523 38.31392807 38.5573111 38.798182279 39.036598213 39.272613547 39.737651721 39.966774837 40.193698059	326.32398236 332.45326538 H 338.6030125 344.7729375 350.96276206 357.17221542 363.40103412 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923 401.16670923	70 71 71 72 73 74 75 76 77 78 80 81	G3228.257587 G7028.075382 J 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678 98834.885678 104194.42395 109776.66113 115588.14177 121635.52718	9.25378E+2 2.51544E+3 4.6.83767E+3 1.85867E+3 1.85867E+3 3.73324E+3 1.0148E+3 2.75851E+3 7.49842E+3 5.54062E+3 1.5061E+3
A 71 72 73 74 75 76 77 88 80 81 82	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 1.61007E+13 2.4151E+13 3.62265E+13 5.43398E+13 8.15097E+13 1.22265E+14 1.83397E+14 2.75095E+14	314432 328509 343000 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368	D 71 72 73 74 75 76 77 88 80 81 82	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+23 3.4001E+23 6.89466E+23 1.39782E+24 5.7424E+24 1.16359E+25 2.35741E+25 4.77526E+25 1.95846E+26 3.96528E+26	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134 6.2667865407 6.2854022189 6.3037807482 6.3037807482 6.3398500029 6.3575520046	37.314071036 37.568110302 37.568110302 37.819389634 38.067974523 38.31392807 38.5573111 38.798182279 39.036598213 39.272613547 39.506281053 39.737651721 39.966774837 40.193698059 40.418467491	326.32398236 332.45326538 H 338.6030125 344.7729375 350.96276206 357.17221542 363.40103412 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923 401.16670923 407.52426124	1 71 72 73 74 75 76 77 78 80 81 82	63228.257587 67028.075382 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678 98834.885678 104194.42395 109776.66113 115588.14177 121635.52718 127925.59628	9.25378E+2 2.51544E+3 4.683767E+3 1.85867E+3 5.05239E+3 3.73324E+3 1.0148E+3 2.75851E+3 7.49842E+3 2.03828E+3 5.54062E+3 4.094E+3
A 71 72 73 74 75 76 77 80 81 82 83	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 1.61007E+13 2.4151E+13 3.62265E+13 5.43398E+13 8.15097E+13 1.22265E+14 1.83397E+14 2.75095E+14 4.12643E+14	314432 328509 343000 343000 C 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368 571787	69 70 71 72 73 74 75 76 77 78 79 80 81 82 83	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+23 3.4001E+23 6.89466E+23 1.39782E+24 5.7424E+24 1.16359E+25 2.35741E+25 4.77526E+25 9.67141E+25 1.95846E+26 3.96528E+26 8.02727E+26	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2094533656 6.2298186905 6.2479275134 6.2667865407 6.2854022189 6.3037807482 6.3037807482 6.3219280949 6.3398500029 6.3575520046 6.3750394313	37.314071036 37.568110302 37.568110302 37.819389634 38.067974523 38.31392807 38.5573111 38.798182279 39.036598213 39.272613547 39.506281053 39.737651721 40.193698059 40.418467491 40.641127751	326.32398236 332.45326538 H 338.6030125 344.7729375 350.96276206 357.17221542 363.40103412 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923 401.16670923 407.52426124 413.89930067	1 71 72 73 74 75 76 77 78 79 80 81 82 83	J 71002.337824 75156.685783 79496.870115 84028.75253 88758.3064 93691.617678 98834.885678 104194.42395 109776.66113 115588.14117 121635.52718 127925.59628 134465.24644	8.6.83767E+3 1.85867E+3 5.05239E+3 1.37338E+3 1.0148E+3 2.75851E+3 7.49842E+3 2.03828E+3 5.54062E+3 4.094E+3 1.11286E+3
A 71 72 73 74 75 76 77 88 79 80 81 82 83	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.070338E+13 2.4151E+13 3.62265E+13 5.43398E+13 8.15097E+13 1.22265E+14 1.83397E+14 2.75095E+14 4.12643E+14 6.18965E+14	314432 328509 343000 343000 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368 571787 592704	D 71 72 73 74 75 76 77 88 79 80 81 82 83 84	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+23 3.4001E+23 6.89466E+23 1.39782E+24 5.7424E+24 1.16359E+25 9.67141E+25 1.95846E+26 8.02727E+26 1.6248E+27	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134 6.2667865407 6.2854022189 6.3037807482 6.3219280949 6.3575520046 6.3750520046 6.3750394313 6.3923174228	G 37.568110302 37.568110302 37.819389634 38.067974523 38.31392807 38.5573111 39.936598213 39.272613547 39.506281053 39.737651721 39.966774837 40.193698059 40.418467491 40.641127751 40.861722034	H 338.6030125 344.7729375 350.96276206 357.1722154 363.40103412 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923 407.52426124 413.89930067 420.29161809	1 71 72 73 74 75 76 77 78 79 80 81 82 83	G3228.257587 G7028.075382 J 71002.337824 75156.685783 79496.870115 84028.75252 88758.3064 93691.617678 98834.885678 104194.42395 109776.66113 115588.14177 121635.52718 127925.59628 134465.24644 141261.49432	8 6.83767E+3 1.85867E+3 5.05239E+3 1.37338E+3 1.0148E+3 2.75851E+3 7.49842E+3 2.03828E+3 5.54062E+3 1.5061E+3 3.02508E+3
A 71 72 73 74 75 76 77 88 80 81 82 83 84 85	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 1.61007E+13 2.4151E+13 3.62265E+13 8.15097E+13 1.22265E+14 1.83397E+14 2.75095E+14 4.12643E+14 6.18965E+14 9.28447E+14	314432 328509 343000 343000 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368 571787 592704 614125	D 71 72 73 74 75 76 77 88 80 81 82 83 84 85	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+22 8.26414E+23 1.67644E+23 3.4001E+23 6.89466E+23 1.39782E+24 5.7424E+24 1.16359E+25 4.77526E+25 9.67141E+25 1.95846E+26 8.02727E+26 8.02727E+26 1.6248E+27 3.28828E+27	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134 6.2667865407 6.2854022189 6.3337807482 6.3398500029 6.3575520046 6.3757520046 6.3757520046 6.3757520046	G 37.568110302 37.568110302 37.819389634 38.067974523 38.31392807 38.5573111 39.922613547 39.936598213 39.272613547 39.936774837 40.193698059 40.418467491 40.641127751 40.861722034 41.080292172	H 338.6030125 344.7729375 350.96276206 357.17221542 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923 401.16670923 407.52426124 413.89930067 420.29161809 426.70100903	70 71 72 73 74 75 76 77 78 79 80 81 82 83 84	J 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678 98834.885678 104194.42395 109776.66113 115588.14177 121635.52718 127925.59628 134465.24644 141261.49432 148321.47668	8 6.83767E+3 1.85867E+3 5.05239E+3 1.373324E+3 3.73324E+3 2.75851E+3 7.49842E+3 2.03828E+3 5.54062E+3 4.094E+3 3.02508E+3 8.22301E+3
A 71 72 73 74 75 76 77 88 81 82 83 84 85 86	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 1.61007E+13 2.4151E+13 3.62265E+13 8.15097E+13 1.22265E+14 1.83397E+14 2.75095E+14 4.12643E+14 6.18965E+14 9.28447E+14 1.39267E+15	314432 328509 343000 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368 571787 592704 614125 636056	P 71 71 72 73 74 75 76 77 88 81 82 83 84 85 86	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+22 8.26414E+23 1.67644E+23 3.4001E+23 6.89466E+23 1.39782E+24 5.7424E+24 1.16359E+25 4.77526E+25 9.67141E+25 1.95846E+26 8.0272FE+26 8.0272FE+26 8.0272FE+26 1.6248E+27 3.28828E+27 6.65393E+27	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134 6.2667665407 6.2854022189 6.3037807482 6.3219280949 6.3398500029 6.3575520046 6.375520046 6.375394313 6.409399361 6.4262647547	37.314071036 37.568110302 37.568110302 38.37.568110302 38.37.974523 38.31392807 38.5573111 38.798182279 39.036598213 39.737651721 39.966774837 40.193698059 40.418467491 40.641127751 40.861722034 41.080292172 41.296878698	326.32398236 332.45326538 H 338.6030125 344.7729375 350.96276206 357.17221542 363.40103412 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923 401.16670923 407.52426124 413.89930067 420.29161809 426.70100903 433.12727378	1 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86	63228.257587 67028.075382 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678 98834.885678 104776.66113 115588.14177 121635.52718 127925.59628 134465.24645 141261.49432 148321.47668 155652.45128	9.25378E+; 2.51544E+; 6.83767E+3 1.85867E+3 1.37338E+3 3.73324E+3 1.0148E+3 2.75851E+3 7.49842E+3 1.5061E+3 4.094E+3 1.11286E+3 3.02508E+3 8.22301E+3 2.23525E+3
A 71 72 73 74 75 76 77 88 82 83 84 85 86 87	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 3.62265E+13 5.43398E+13 1.22265E+14 1.83397E+14 2.75095E+14 4.12643E+14 6.18965E+14 1.39267E+15 2.08901E+15	314432 328509 343000 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368 571787 592704 614125 636056 658503	D 71 71 72 73 74 75 76 77 88 80 81 82 83 84 85 86 87	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+22 8.26414E+23 3.4001E+23 6.89466E+23 1.39782E+24 5.7424E+24 1.16359E+25 9.67141E+25 9.67141E+25 1.95846E+26 8.02727E+26 1.6248E+27 3.28828E+27 6.65393E+27 1.34626E+28	6.0874628413 6.1085244568 6.1292830169 6.1292830169 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134 6.2667865407 6.2854022189 6.3037807482 6.3037807482 6.3398500029 6.3575520046 6.37933174228 6.4093909361 6.4093909361 6.4029434958	37.314071039 37.568110302 37.568110302 37.819389634 38.067974523 38.31392807 38.5573111 38.798182279 39.036598213 39.272613547 39.506281053 39.737651721 39.9667774837 40.193698059 40.418467491 40.641127751 41.080292172 41.296878698 41.511520891	326.32398236 332.45326538 H 338.6030125 344.7729375 350.96276206 357.17221542 363.40103412 369.64896163 375.91574817 382.2011503 388.50493114 394.82685923 401.16670923 407.52426124 413.89930067 420.29161809 426.70100903 433.12727378 439.57021728	1 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87	63228.257587 67028.075382 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678 98834.885678 104194.42395 109776.66113 115588.14177 121635.52718 127925.59628 134465.24644 141261.49436 148321.47668 155652.45128 163261.79763	9.25378E+; 2.51544E+; 2.51544E+; 4.6.83767E+3 1.85867E+3 5.05239E+3 3.73324E+3 1.0148E+3 2.75851E+3 7.49842E+3 1.5061E+3 4.094E+3 1.11286E+3 3.02508E+3 3.02508E+3 2.23525E+3 6.07603E+3
A 71 72 73 74 75 76 77 88 80 81 82 83 84 85 86 87 88	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 1.61007E+13 2.4151E+13 3.62265E+14 5.43398E+13 8.15097E+13 1.22265E+14 1.83397E+14 4.12643E+14 6.18965E+14 9.28447E+14 9.28447E+15 2.08901E+15 3.13351E+15	314432 328509 343000 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368 571787 592704 614125 636056 658503 681472	D 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+23 3.4001E+23 6.89466E+23 1.39782E+24 5.7424E+24 1.16359E+25 2.35741E+25 4.77526E+25 1.95846E+26 3.96528E+26 8.02727E+26 1.6248E+27 3.28828E+27 1.34626E+28 2.72347E+28	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134 6.2667865407 6.2854022189 6.3037807482 6.3037807482 6.3398500029 6.3575520046 6.3750394313 6.3923174228 6.4093909361 6.492647547 6.4429434958 6.4594316186	37.314071036 37.568110302 37.568110302 38.19389634 38.067974523 38.31392807 38.5573111 38.798182279 39.036598213 39.272613547 39.506281053 39.737651721 39.966774837 40.193698059 40.418467491 40.641127751 40.861722034 41.080292172 41.296878698 41.511520891 41.724256836	H 338.6030125 344.7729375 350.96276206 357.17221542 363.40103412 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923 401.16670923 407.52426124 413.89930067 420.29161809 426.70100903 433.12727378 439.57021728 446.0296489	1 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88	J 71002.337824 75156.685783 79496.870115 84028.75253 88758.3064 93691.617678 98834.885678 104796.66113 115588.14177 121635.52718 127925.59628 134465.24644 141261.49432 148321.4766 155662.45128 163261.79763 171157.01793	8.25378E+ 2.51544E+ 1.85867E+3 5.05239E+3 3.7338E+3 1.0148E+3 2.75851E+3 7.49842E+3 2.03828E+3 1.5061E+3 4.094E+3 1.11286E+3 3.02508E+3 8.22301E+3 2.23525E+3 6.07603E+3 1.65164E+3
A 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 3.62265E+13 5.43398E+13 1.22265E+14 1.83397E+14 2.75095E+14 4.12643E+14 6.18965E+14 1.39267E+15 2.08901E+15	314432 328509 343000 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368 571787 592704 614125 636056 658503	69 70 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+23 3.4001E+23 6.89466E+23 1.39782E+24 2.83342E+24 5.7424E+24 1.16359E+25 2.35741E+25 4.77526E+25 9.67141E+25 4.02727E+26 1.6248E+27 3.28828E+27 6.65393E+27 6.65393E+27 1.34626E+28 2.72347E+28 5.50883E+28	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2094533656 6.298186905 6.2479275134 6.2667865407 6.2854022189 6.3037807482 6.3219280949 6.3398500029 6.3575520046 6.3750394313 6.3923174228 6.4093909361 6.4262647547 6.4429434958 6.4429434958 6.4594316186 6.475733431	37.314071036 37.568110302 37.568110302 37.819389634 38.067974523 38.31392807 38.5573111 38.798182279 39.036598213 39.272613547 39.506281053 39.737651721 40.193698059 40.418467491 40.641127751 40.861722034 41.296878698 41.24256836 41.724256836 41.935123469	326.32398236 332.45326538 H 338.6030125 344.7729375 350.96276206 357.17221542 363.40103412 369.64896163 375.91574817 382.2011503 388.50493114 394.82685923 401.16670923 407.52426124 413.89930067 420.29161809 426.70100903 433.12727378 439.57021728	1 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88	63228.257587 67028.075382 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678 98834.885678 104194.42395 109776.66113 115588.14177 121635.52718 127925.59628 134465.24644 141261.49436 148321.47668 155652.45128 163261.79763	8.25378E+ 2.51544E+ 2.51544E+ 2.51544E+ 1.85867E+3 5.05239E+3 1.37338E+3 2.75851E+3 7.49842E+3 2.03828E+3 5.54062E+3 4.094E+3 1.11286E+3 3.02508E+3 8.22301E+3 2.23525E+3 6.07603E+3 1.65164E+3 4.48961E+3
A 71 72 73 74 75 76 77 88 79 80 81 82 83 84 85 86 87 88	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 7.15586E+13 1.61007E+13 2.4151E+13 3.62265E+13 5.43398E+13 8.15097E+13 1.22265E+14 1.83397E+14 2.75095E+14 4.12643E+14 6.18965E+14 9.28447E+14 1.39267E+15 2.08901E+15 3.13351E+15 4.70026E+15	314432 328509 343000 343000 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368 571787 592704 614125 636056 658503 681472 704969	D 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+22 8.26414E+23 1.67644E+23 3.4001E+23 6.89466E+23 1.39782E+24 5.7424E+24 1.16359E+25 4.77526E+25 9.67141E+25 1.95846E+26 3.96528E+26 1.6248E+27 3.28828E+27 6.65393E+27 1.34626E+28 5.50883E+28 1.11415E+29	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2677865407 6.2854022189 6.3037807482 6.337807482 6.337807482 6.3575520046 6.3750394313 6.3923174228 6.4093909361 6.4262647547 6.4429434958 6.4594316186 6.475733431 6.4918530963	G 37.314071036 37.568110302 37.568110302 37.568110302 37.819389634 38.067974523 38.31392807 38.5573111 38.798182279 39.036598213 39.272613547 39.506281053 39.737651721 39.966774837 40.193698059 40.418467491 40.641127751 40.861722034 41.080292172 41.296878698 41.511520891 41.724256836 41.935123469 42.144156624	H 338.6030125 344.7729375 350.96276206 363.40103412 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923 401.16670923 407.52426124 413.89930067 420.29161809 426.70100903 433.12727378 439.57021728 446.0296489	1 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90	J 71002.337824 75156.685783 79496.870115 84028.75253 88758.3064 93691.617678 98834.885678 104794.42395 109776.66113 115588.14177 121635.52718 127925.59628 134465.24644 141261.49432 148321.47668 155652.45128 163261.79763 171157.01793 179345.7378	8.25378E+ 2.51544E+ 2.51544E+ 1.85867E+3 5.05239E+3 1.37338E+3 1.0148E+3 2.75851E+3 7.49842E+3 2.03828E+3 5.54062E+3 1.5061E+3 3.02508E+3 8.22301E+3 2.23525E+3 6.07603E+3 4.69164E+3 1.65164E+3 4.48961E+3 1.2204E+3
A 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 1.61007E+13 2.4151E+13 3.62265E+13 1.22265E+14 1.83397E+14 2.75095E+14 1.8397E+14 4.12643E+14 6.18965E+14 9.28447E+14 1.39267E+15 2.08901E+15 3.13351E+15 4.70026E+15 7.05039E+15	314432 328509 343000 343000 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368 571787 592704 614125 636056 658503 681472 704969 729000	P 70 71 71 72 73 74 75 76 77 88 84 85 86 87 88 89 90 91	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+22 8.26414E+23 8.26414E+23 3.4001E+23 6.89466E+23 1.39782E+24 5.7424E+24 1.16359E+25 4.77526E+25 9.67141E+25 1.95846E+26 8.02727E+26 8.02727E+26 6.65393E+27 1.6248E+27 3.28828E+27 6.65393E+27 1.34626E+28 2.72347E+28 1.11415E+29 2.25305E+29	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2879275134 6.2667865407 6.3854022189 6.3037807482 6.395309431 6.375052046 6.37505394313 6.3923174228 6.4093909361 6.4262647547 6.4429434958 6.4594316186 6.475733431 6.4918530963 6.5077946402	37.314071036 37.568110302 37.568110302 38.37.568110302 38.37.91392807 38.5573111 38.798182279 39.036598213 39.272613547 40.193698059 40.41127751 40.61722034 41.080292172 41.296878698 41.511520891 41.724256836 42.144156624 42.351391079	H 338.6030125 344.7729375 350.96276206 363.40103412 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923 401.16670923 407.52426124 413.89930067 420.29161809 426.70100903 433.127277378 439.57021728 446.0296489 452.50538233 458.99723543	1 71 72 73 74 75 76 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91	J 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678 98834.885678 104194.42395 109776.66113 115588.14177 121635.52718 127925.59628 134465.24644 141261.49432 148321.47668 155652.45128 163261.79763 171157.01793 179345.7378 187835.70719	9.25378E+; 2.51544E+; 2.51544E+; 3.185867E+3 1.37338E+3 3.73324E+3 1.0148E+3 2.75851E+3 7.49842E+3 1.5061E+3 4.094E+3 1.1286E+3 3.02508E+3 8.22301E+3 2.23525E+3 6.07603E+3 1.65164E+3 1.2204E+3 3.3174E+3
A 71 72 73 74 75 76 77 88 84 85 86 87 88 89 90 91 92	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 1.61007E+13 2.4151E+13 3.62265E+13 8.15097E+13 1.22265E+14 1.83397E+14 2.75095E+14 4.12643E+14 9.28447E+14 1.39267E+15 2.08901E+15 3.13351E+15 3.13351E+15 4.70026E+15 7.05039E+15 1.05756E+16	314432 328509 343000 343000 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368 571787 592704 614125 636056 658503 681472 704969 729000 753571	D 71 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+22 8.26414E+23 3.4001E+23 3.4001E+23 1.39782E+24 2.83342E+24 5.7424E+24 1.16359E+25 2.35741E+25 9.67141E+25 9.67141E+25 1.95846E+26 8.02727E+26 1.6248E+27 3.28828E+27 6.65393E+27 1.34626E+28 2.72347E+28 5.50883E+28 4.11415E+29 2.25305E+29 4.55562E+29	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134 6.2667865407 6.2854022189 6.3037807482 6.3037807482 6.3398500029 6.3575520046 6.37934128 6.493399361 6.492434958 6.49594316186 6.475733431 6.4918530963 6.5077946402 6.5235619561	37.314071036 37.568110302 37.568110302 37.819389634 38.067974523 38.31392807 38.5573111 38.798182279 39.036598213 39.272613547 39.506281053 99.66774837 40.193698059 40.418467491 40.641127751 40.861722034 41.080292172 41.296878698 41.511520891 41.724256836 41.935123469 42.144156624 42.351391079 42.556860595	326.32398236 332.45326538 332.45326538 332.45326538 344.7729375 350.96276206 357.17221542 363.40103412 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923 401.16670923 407.52426124 413.89930067 420.29161809 426.70100903 433.12727378 439.57021728 446.0296489 452.50538233 458.99723543 465.50503007	1 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91 92	63228.257587 67028.075382 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678 98834.885678 109776.66113 115588.14177 121635.52718 127925.59628 134465.24644 141261.49432 148321.47668 155652.45128 163261.79763 171157.0179 179345.7378 187835.70719	8.25378E+ 2.51544E+ 1.85867E+3 5.05239E+3 3.73324E+3 1.0148E+3 2.75851E+3 7.49842E+3 1.5061E+3 4.094E+3 1.11286E+3 3.02508E+3 5.2301E+3 2.23525E+3 6.07603E+3 1.65164E+3 4.48961E+3 1.2204E+3 3.3174E+3 9.01763E+3
A 71 72 73 74 75 76 77 88 84 89 90 91 92 93	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 1.61007E+13 2.4151E+13 3.62265E+13 5.43398E+13 8.15097E+13 1.22265E+14 4.183397E+14 2.75095E+14 4.12643E+14 6.18965E+14 9.28447E+14 1.39267E+15 2.08901E+15 3.13351E+15 4.70026E+15 1.05756E+16 1.58634E+16	314432 328509 343000 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368 571787 592704 614125 636056 658503 681472 704969 729000 753571 778688	69 70 71 72 73 74 75 76 77 88 81 82 83 84 85 86 87 88 89 90 91 92	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+22 8.26414E+23 3.4001E+23 3.4001E+23 1.39782E+24 2.83342E+24 5.7424E+24 1.16359E+25 9.67141E+25 9.67141E+25 1.95846E+26 8.02727E+26 1.62393E+27 1.34626E+28 2.72347E+28 5.5083E+28 1.1145E+29 9.21027E+29	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134 6.2667865407 6.2854022189 6.3037807482 6.3037807482 6.3398500029 6.3575520046 6.3398500029 6.3575520046 6.4093909361 6.4262647547 6.4429434958 6.4594316186 6.497533431 6.497533431 6.497533431 6.5077946402 6.5235619561 6.5391588111	37.314071036 37.568110302 37.568110302 37.568110302 38.19389634 38.31392807 38.5573111 38.798182279 39.036598213 39.272613547 39.506281053 39.737651721 39.966774837 40.193698059 40.418467491 40.641127751 40.861722034 41.080292172 41.296878698 41.511520891 41.724256836 41.935123469 42.144156624 42.144156624 42.351391079 42.556860595 42.760597957	H 338.6030125 344.7729375 350.96276206 357.17221542 363.40103412 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923 401.16670923 407.52426124 413.89930067 420.29161809 433.12727378 439.57021728 446.0296489 452.5053823 465.50503007 472.02859202	1 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91 92 93	63228.257587 67028.075382 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678 98834.885678 104797.6.66113 115588.14177 121635.52718 127925.59628 134465.24644 141261.49432 148321.47668 155652.45128 163261.79763 17157.01793 179345.7378 187835.70719 196634.80119 205751.02085	8.25378E+; 2.51544E+; 2.51544E+; 3.68867E+3 5.05239E+3 3.73324E+3 1.0148E+3 2.75851E+3 7.49842E+3 1.5061E+3 4.094E+3 1.11286E+3 3.02508E+3 8.22301E+3 2.23525E+3 6.07603E+3 1.65164E+3 4.48961E+3 1.2204E+3 2.3174E+3 9.01763E+3
A 71 72 73 74 75 76 77 88 88 89 90 91 92 93 94	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 3.62265E+13 5.43398E+13 8.15097E+13 1.22265E+14 1.83397E+14 2.75095E+14 4.12643E+14 6.18965E+14 1.39267E+15 2.08901E+15 3.13351E+15 4.70026E+15 7.05039E+15 1.06756E+16 1.58634E+16 2.37951E+16	314432 328509 343000 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368 571787 592704 614125 636056 658503 681472 704969 729000 753571 778688 804357	69 70 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91 92 93	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+23 3.4001E+23 6.89466E+23 1.39782E+24 5.7424E+24 1.16359E+25 2.35741E+25 4.77526E+25 1.95846E+26 3.96528E+26 8.02727E+26 1.6248E+27 3.28828E+27 1.34626E+28 2.72347E+28 5.50883E+28 1.11415E+29 2.25305E+29 9.21027E+29 1.86186E+30	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134 6.2667865407 6.2854022189 6.3037807482 6.3037807482 6.3398500029 6.3575520046 6.3398500029 6.3575520046 6.475402189 6.493493458 6.49349346186 6.49343458 6.493436186 6.4954316186 6.495436185	37.314071036 37.568110302 37.568110302 37.819389634 38.067974523 38.31392807 38.5573111 38.788182279 39.036598213 39.272613547 39.506281053 39.737651721 39.966774837 40.193698059 40.418467491 40.641127751 40.861722034 41.080292172 41.296878698 41.511520891 41.724256836 41.935123469 42.14156624 42.351391079 42.556860595 42.760597957 42.962635015	326.32398236 332.45326538 332.45326538 338.6030125 344.7729375 350.96276206 357.17221542 363.40103412 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923 401.16670923 407.52426124 413.89930067 420.29161809 426.70100903 433.12727378 439.57021728 446.0296489 452.50538233 458.9972353 465.50503007 472.02859202 478.56775083	1 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94	63228.257587 67028.075382 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678 98834.885678 104194.42395 109776.66113 115588.14177 121635.52718 127925.59628 134465.24644 141261.49432 148321.47668 155652.45128 163261.79763 171157.01793 179345.7378 187835.70719 196634.80119 205751.02085 215192.494	8.25378E+ 2.51544E+ 1.85867E+3 5.05239E+3 1.37338E+3 1.0148E+3 2.75851E+3 7.49842E+3 2.03828E+3 1.5061E+3 4.094E+3 1.11286E+3 3.02508E+3 8.22301E+3 2.23525E+3 6.07603E+3 1.65164E+3 4.48961E+3 1.2204E+3 3.3174E+3 9.01763E+3 2.45125E+4 6.66318E+4
A A 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 90 91 92 93 94 95	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 1.61007E+13 2.4151E+13 3.62265E+14 5.43398E+13 5.43398E+13 8.15097E+13 1.22265E+14 1.83397E+14 4.12643E+14 6.18965E+14 9.28447E+14 9.28447E+15 2.08901E+15 3.13351E+15 4.70026E+15 7.05039E+15 1.58634E+16 2.37951E+16 3.56926E+16	314432 328509 343000 343000 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368 571787 592704 614125 636056 658503 681472 704969 729000 753571 778688 804357 830584	69 70 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+22 8.26414E+23 1.67644E+23 3.4001E+23 6.89466E+23 1.39782E+24 5.7424E+24 1.16359E+25 4.77526E+25 9.67141E+25 4.77526E+25 9.67141E+25 1.95846E+26 3.96528E+26 6.65393E+27 1.34626E+28 5.50883E+28 1.11415E+29 2.25305E+29 4.55562E+29 9.21027E+29 1.86186E+30 3.76334E+30	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2677865407 6.2854022189 6.3037807482 6.337807482 6.337807482 6.3575520046 6.3750394313 6.3923174228 6.4093909361 6.4262647547 6.4429434958 6.4594316186 6.475733431 6.4918530963 6.507796402 6.5391588111 6.5545888517 6.5698556083	37.314071036 37.568110302 37.568110302 37.819389634 38.067974523 38.31392807 38.5573111 38.798182279 39.036598213 39.272613547 39.506281053 39.737651721 40.193698059 40.418467491 40.641127751 40.861722034 41.296878698 41.242568364 41.351520891 41.724256836 42.144156624 42.351391079 42.5568605957 42.962635015 43.163002714	H 338.6030125 344.7729375 350.96276206 357.17221542 363.40103412 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923 401.16670923 407.52426124 413.89930067 420.29161809 426.70100903 433.12727378 439.57021728 446.0296489 452.50538233 458.99723543 465.50503007 472.02859202 478.56775083	1 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95	J 71002.337824 75156.685783 79496.870115 84028.75253 88758.3064 93691.617678 98834.885678 104776.66113 115588.14177 121635.52718 127925.59628 134465.24644 141261.49432 148321.47663 171157.01793 179345.7378 187835.70719 196634.80119 1905751.02085 215192.494 224967.47615	8.25378E+ 2.51544E+ 2.51544E+ 2.51544E+ 1.85867E+3 5.05239E+3 1.37338E+3 2.75851E+3 7.49842E+3 2.03828E+3 5.54062E+3 3.02508E+3 8.22301E+3 2.23525E+3 6.07603E+3 1.65164E+3 4.48961E+3 1.2204E+3 3.3174E+3 9.01763E+3 2.45125E+4 6.66318E+4
A 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 99 91 92 93 94 95	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 1.61007E+13 2.4151E+13 3.62265E+13 1.22265E+14 1.83397E+14 2.75095E+14 1.2245E+14 1.39267E+15 2.08901E+15 2.08901E+15 2.08901E+15 1.05756E+16 1.58634E+16 2.37951E+16 3.56926E+16 5.35389E+16	314432 328509 343000 343000 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368 571787 592704 614125 636056 658503 681472 704969 729000 753571 77868 804357 830584 857375	69 70 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 99 91 92 93 94 95	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+22 8.26414E+23 8.26414E+23 6.89466E+23 1.39782E+24 5.7424E+24 1.16359E+25 4.77526E+25 9.67141E+25 1.95846E+26 8.02727E+26 8.02727E+26 6.05393E+27 1.34626E+28 2.72347E+28 1.11415E+29 2.25305E+29 9.21027E+29 9.21027E+29 1.86186E+30 7.6059E+30 7.6059E+30	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134 6.2667865407 6.2854022189 6.3037807482 6.3037807482 6.3037807482 6.39398500029 6.3575520046 6.3750394313 6.3923174228 6.4093909361 6.4262647547 6.44934934936 6.475733431 6.4918530963 6.5077946402 6.5235619561 6.5545888517 6.5698556083 6.5849625007	37.314071036 37.568110302 37.568110302 38.37.568110302 38.067974523 38.31392807 38.573111 38.798182279 39.036598213 39.737651721 39.966774837 40.193698059 40.418467491 40.641127751 40.861127034 41.080292172 41.296878698 41.511520891 41.724256836 42.144156624 42.351391079 42.556860599 42.760597957 42.962635015 43.163002714 43.361731136	H 338.6030125 344.7729375 350.96276206 363.40103412 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923 401.16670923 407.52426124 413.89930067 420.29161809 426.70100903 433.12727378 439.57021728 446.0296489 452.50538233 458.99723543 465.50503007 472.02859207 478.56775083 485.12233968 491.69219529	1 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94	J 71002.337824 75156.685783 79496.870115 84028.75253 88758.3064 93691.617678 98834.885678 104194.42395 109776.66113 115588.14177 121635.52718 127925.59628 134465.24644 141261.49432 148321.47668 155652.45128 163261.79763 171157.01793 179345.7378 187835.70719 196634.80119 205751.0208 215192.494 224967.47615 235084.35123	9.25378E+; 2.51544E+; 6.83767E+3 1.85867E+3 1.85867E+3 1.37338E+3 3.73324E+3 1.0148E+3 2.75851E+3 7.49842E+3 2.03828E+3 5.54062E+3 1.5061E+3 4.094E+3 1.1286E+3 3.02508E+3 8.22301E+3 2.23525E+3 6.07603E+3 1.2204E+3 3.3174E+3 9.01763E+3 2.45125E+4 4.8961E+4 4.92346E+4
A 71 72 73 74 75 76 77 88 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 4.77057E+12 1.07338E+13 1.61007E+13 2.4151E+13 3.62265E+13 5.43398E+13 1.22265E+14 1.83397E+14 2.75095E+14 4.12643E+14 6.18965E+14 1.39267E+15 2.08901E+15 3.13351E+15 4.70026E+15 1.05756E+16 1.58634E+16 2.37951E+16 3.59389E+16 5.35389E+16 5.35389E+16 8.03084E+16 1.20463E+17 1.80694E+17	314432 328509 343000 343000 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368 571787 592704 614125 636056 658503 681472 704969 729000 753571 778688 804357 830584 857375 884736	D 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+22 8.26414E+23 3.4001E+23 3.4001E+23 1.39782E+24 2.83342E+24 5.7424E+24 1.16359E+25 2.35741E+25 9.67141E+25 9.67141E+25 1.95846E+26 8.02727E+26 1.6248E+27 3.28828E+27 6.65393E+27 1.34626E+28 2.72347E+28 5.50883E+28 2.72347E+28 1.11415E+29 2.25305E+29 9.21027E+29 1.86186E+30 3.76334E+30 1.53703E+31 3.10574E+31	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134 6.2667365407 6.2854022189 6.3037807482 6.3398500029 6.3575520046 6.3923174228 6.493499361 6.4962647547 6.4429434958 6.4594316186 6.475733431 6.5545888517 6.5698556083 6.56995128422 6.6187098441	37.314071036 37.568110302 37.568110302 37.568110302 38.139389634 38.31392807 38.5573111 38.798182279 39.036598213 39.272613547 39.506281053 39.737651721 39.966774837 40.193698059 40.418467491 40.641127751 40.861722034 41.080292172 41.296878698 41.511520891 41.724256836 41.935123469 42.144156624 42.351391079 42.556860595 42.760597957 43.163002714 43.361731136 43.558849524 43.754386322	H 338.6030125 344.7729375 350.96276206 357.17221542 363.40103412 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923 401.16670923 407.52426124 413.89930067 420.29161809 426.70100903 433.12727378 439.57021728 446.0296489 452.5053823 465.50538037 472.02859202 478.56775083 485.12233968 491.69219529 498.27715779 504.87707064 511.49178048	1 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98	63228.257587 67028.075382 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678 98834.885678 104194.42395 109776.66113 115588.14177 121635.52718 127925.59628 134465.24644 441261.49432 148321.47668 155652.45128 163261.79763 17157.01793 179345.7378 187835.70719 196634.80119 205751.02085 215192.494 224967.47615 235084.35123 245551.63247 256377.96323 267572.11782	9.25378E+; 2.51544E+; 3.68867E+3 5.05239E+3 5.05239E+3 3.73324E+3 1.0148E+3 2.75851E+3 7.49842E+3 1.5061E+3 4.094E+3 1.11286E+3 3.02508E+3 5.54062E+3 4.094E+3 1.11286E+3 3.02508E+3 2.23525E+3 6.07603E+3 1.65164E+3 4.48961E+3 1.2204E+3 1.2124E+4 4.81124E+4 4.81124E+4 1.33833E+4 1.33833E+4 3.63797E+4
A 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 7.15586E+12 1.07338E+13 1.61007E+13 2.4151E+13 3.62265E+13 5.43398E+13 8.15097E+13 1.22265E+14 1.83397E+14 2.75095E+14 4.12643E+14 6.18965E+14 9.28447E+14 1.39267E+15 2.08901E+15 3.13351E+15 4.70026E+15 7.05039E+15 1.05756E+16 1.58634E+16 2.37951E+16 3.55389E+16 8.03084E+16 8.03084E+16 8.03084E+17 1.80694E+17 1.80694E+17	314432 328509 343000 343000 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368 571787 592704 614125 636056 658503 681472 704969 729000 753571 778688 804357 830584 857375 884736 912673 941192 970299	69 70 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+23 3.4001E+23 3.4001E+23 1.39782E+24 2.83342E+24 5.7424E+24 1.16359E+25 2.35741E+25 9.67141E+25 9.67141E+25 1.95846E+26 3.96528E+26 8.02727E+26 1.6248E+27 1.34626E+28 2.72347E+28 5.5083E+27 1.34626E+28 2.72347E+28 5.5083E+27 1.34626E+29 9.21027E+29 1.53703E+31 3.76334E+30 7.6059E+30 7.6059E+30 1.53703E+31 3.10574E+31 6.27487E+31	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134 6.2667865407 6.2854022189 6.3037807482 6.3037807482 6.3398500029 6.3575520046 6.33780344313 6.3923174228 6.492399361 6.492434958 6.4954316186 6.47533431 6.4918530963 6.492434958 6.4594316186 6.47533431 6.5915888517 6.5695856083 6.5999128422 6.6147098441 6.6293566201	37.314071036 37.568110302 37.568110302 37.568110302 38.19389634 38.31392807 38.5573111 38.798182279 39.036598213 39.272613547 39.506281053 39.737651721 39.966774837 40.193698059 40.418467491 40.641127751 40.861722034 41.080292172 41.296878698 41.511520891 41.724256836 41.915123469 42.144156624 42.351391079 42.55680597957 42.962635015 43.163002714 43.361731136 43.158849524 43.754386322 43.948369196	H 338.6030125 344.7729375 350.96276206 357.17221542 363.40103412 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923 401.16670923 407.52426124 413.89930067 420.291618093 433.12727378 439.57021728 446.0296489 452.50538233 458.99723543 458.99723543 458.9972354 461.69219529 478.56775083 485.12233968 491.69219529 498.27715779 504.87707064 511.49178048 518.1211371	1 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 99	63228.257587 67028.075382 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678 98834.885678 104194.42395 109776.66113 115588.14177 121635.52718 127925.59628 134465.24644 141261.49432 148321.47668 155652.45128 163261.79763 179345.7378 187835.70719 196634.80119 205751.02085 215192.494 224967.47615 235084.35123 245551.63242 256377.96323 267572.11782 279143.00231	8.25378E+2 2.51544E+3 1.85867E+3 1.85867E+3 5.05239E+3 3.73324E+3 1.0148E+3 2.75851E+3 7.49842E+3 1.5061E+3 4.094E+3 1.11286E+3 3.02508E+3 8.25301E+3 4.23525E+3 6.07603E+3 1.56164E+3 4.48961E+3 1.2204E+3 2.3152E+4 6.66318E+4 1.81124E+4 4.92346E+4 4.92346E+4 1.33833E+4 9.88903E+4
A 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99	9.42336E+11 1.4135E+12 2.12026E+12 8 3.18038E+12 4.77057E+12 4.77057E+12 1.07338E+13 1.61007E+13 2.4151E+13 3.62265E+13 5.43398E+13 1.22265E+14 1.83397E+14 2.75095E+14 4.12643E+14 6.18965E+14 1.39267E+15 2.08901E+15 3.13351E+15 4.70026E+15 1.05756E+16 1.58634E+16 2.37951E+16 3.59389E+16 5.35389E+16 5.35389E+16 8.03084E+16 1.20463E+17 1.80694E+17	314432 328509 343000 343000 357911 373248 389017 405224 421875 438976 456533 474552 493039 512000 531441 551368 571787 592704 614125 636056 658503 681472 704969 729000 753571 778688 804357 830584 857375 844736 912673 941192	69 70 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96	2.00701E+22 4.07304E+22 8.26414E+22 8.26414E+23 3.4001E+23 3.4001E+23 1.39782E+24 2.83342E+24 5.7424E+24 1.16359E+25 2.35741E+25 9.67141E+25 9.67141E+25 1.95846E+26 3.96528E+26 8.02727E+26 1.6248E+27 1.34626E+28 2.72347E+28 5.5083E+27 1.34626E+28 2.72347E+28 5.5083E+27 1.34626E+29 9.21027E+29 1.53703E+31 3.76334E+30 7.6059E+30 7.6059E+30 1.53703E+31 3.10574E+31 6.27487E+31	6.0874628413 6.1085244568 6.1292830169 F 6.1497471195 6.1699250014 6.1898245589 6.2094533656 6.2288186905 6.2479275134 6.2667865407 6.2854022189 6.3037807482 6.3037807482 6.3398500029 6.3575520046 6.33780344313 6.3923174228 6.492399361 6.492434958 6.4954316186 6.47533431 6.4918530963 6.492434958 6.4594316186 6.47533431 6.5915888517 6.5695856083 6.5999128422 6.6147098441 6.6293566201	37.314071036 37.568110302 37.568110302 37.568110302 38.19389634 38.31392807 38.5573111 38.798182279 39.036598213 39.272613547 39.506281053 39.737651721 39.966774837 40.193698059 40.418467491 40.641127751 40.861722034 41.080292172 41.296878698 41.511520891 41.724256836 41.915123469 42.144156624 42.351391079 42.55680597957 42.962635015 43.163002714 43.361731136 43.158849524 43.754386322 43.948369196	H 338.6030125 344.7729375 350.96276206 357.17221542 363.40103412 369.64896163 375.91574817 382.20115039 388.50493114 394.82685923 401.16670923 407.52426124 413.89930067 420.29161809 426.70100903 433.12727378 439.57021728 446.0296489 452.5053823 465.50538037 472.02859202 478.56775083 485.12233968 491.69219529 498.27715779 504.87707064 511.49178048	1 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 99	63228.257587 67028.075382 71002.337824 75156.685783 79496.870115 84028.752523 88758.3064 93691.617678 98834.885678 104194.42395 109776.66113 115588.14177 121635.52718 127925.59628 134465.24644 441261.49432 148321.47668 155652.45128 163261.79763 17157.01793 179345.7378 187835.70719 196634.80119 205751.02085 215192.494 224967.47615 235084.35123 245551.63247 256377.96323 267572.11782	8.25378E+2 2.51544E+3 1.85867E+3 5.05239E+3 3.73324E+3 1.0148E+3 2.75851E+3 7.49842E+3 1.5061E+3 4.094E+3 1.11286E+3 3.02508E+3 8.25301E+3 4.23525E+3 6.07603E+3 1.5061E+3 4.48961E+3 1.2204E+3 1.2204E+3 2.45125E+4 6.66318E+4 1.81124E+4 4.92346E+4 4.92346E+4 1.33833E+4 9.88903E+4

Graph 1:



Graph 2:



code:

```
public class functions {
  public static void main(String[] args) {
    for (int i = 0; i < 100; i++) {
       //Calling all 10 functions with n as the argument
  }
  for (int i = 0; i < 20; i++) {
       //calling all 11 functions with n! as the argument</pre>
```

```
}
public static double first(int n){
  return Math.pow(1.5, n);
}
public static double second(int n){
  return Math.pow(n, 3);
}
public static double third(int n){
  return Math.pow(2, Math.pow(2, n));
}
public static double fourth(int n){
  return n * Math.pow(2, n);
}
public static double fifth(int n){
  return Math.pow((Math.log(n)/Math.log(2)), 2);
}
public static double sixth(int n){
  int s = 1;
  for (int i = 1; i \le n; i++) {
     s = s * n;
  return Math.log(s)/Math.log(2);
}
public static double seventh(int n){
  return Math.log(n)/Math.log(2);
}
public static double eigth(int n){
  return Math.pow(2, (Math.log(n)/Math.log(2)));
```

```
public static double ninth(int n){
    return Math.pow(Math.log(n)/Math.log(2), Math.log(n)/Math.log(2));
}

public static double tenth(int n){
    return Math.pow(2.718, n);
}
```

Output:

```
functions / /usr/lib/jvm/jdk-17/bin/java -javaagent:/snap/intellij-idea-community/489/lib/idea_rt.jar=44687:/snap/intellij-idea-community/489/bin -Dfile.encoding enter a number : 129.746337890625 1728.0 Infinity 49152.0 12.851956131576888 NaN 3.5849625007211565 12.000000000000000 97.23140469668289 162552.4160011032 Process finished with exit code 0
```

Conclusion:

Learnt how implement the various graphs of functions in excel. Learnt about the various and their domains and ranges respectively.