

Daily System Generation Summary on Thursday

Thursday, October 14, 2021

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,222 MW
Distillate	0 MW
Total TNB	2,222 MW
Total IPP	18,515 MW
Total Co-Gen	0 MW
Total System	22,985 MW

Generation Mix

Type	MWh	Percentage
Hydro	21,564	5.54 %
Gas	31,332	8.05 %
Total TNB	52,896	13.59 %
ST-Coal	262,212	67.36 %
LSS	3,812	0.98 %
Gas	69,893	17.96 %
Total IPP	335,917	86.30 %
Co-Gen	1,263	0.32 %
Total Co-Gen	1,263	0.32 %
Total Generation	390,076	100.21 %
PLTG	1,521	0.39 %
HVDC	-698	-0.18 %
Interconnection	823	0.21 %
Net Energy	389,253	100.00 %

Maximum Demand Record

Date: 3/10/2020	18,808 MW
Date: 3/10/2020	394,238 MWH

Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	16:30:00 Hour
Total Set On Bus	19,587 MW
TNB Generation	2,815 MW
IPP Generation	15,494 MW
Spinning Reserve	1,226 MW
Maximum Demand	18,309 MW
Net Energy	389,253 MWH
Load Factor	88.58 %

Fuel Cost

Total Cost:	84,097,011.47 RM
Cost per Unit	21.55 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	629
Hydro	284
Syncon	334
Thermal	227
Total	1,474

Time	Weather	Temperature
Afternoon	Hot	34
Morning	Sunny	25

Gas Usage

Station	(mmscfd)
GLGR	46
SRDG	10
TJGS	173
Total TNB	229
CBPS	47
KLPP	62
NPRI	147
PGLA	88
PLPS	69
SGB3	4
Total IPP	417
Total Gas	646
Total Gas Required	646

Alternate Fuel Usage

Station	(mmscfd)
Total	0

Hourly System MW Generation

	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
System Total	16208	15400	14771	14314	13931	13655	13625	13605	13950	15749	16624	17183	17304	17228	17807	18224	18231	17889	16693	16951	17806	17519	17220	16994

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, November 3, 2021 1:11:27 PM
(Ir. Shanmugam Thoppalan)
Head
Grid System Operator

Daily MW Generation on Thursday

Station	Unit	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300																									
JMAH	U001	692	693	692	691	694	692	690	693	692	693	689	691	692	691	701	693	693	694	693	688	698	690	695	693	692	693	691	694	694	689	696	692	691	693	690	692	693	691	694	693	692	692	692	694	693				
JMAH	U002	697	696	697	693	692	697	692	695	696	697	698	687	695	695	690	699	693	701	693	696	696	699	696	698	691	695	696	695	696	693	697	697	693	696	696	693	696	696	693	696	691	697	696	697	696	696			
JMHE	U001	983	982	972	974	947	900	898	880	881	880	862	860	861	862	862	860	918	974	980	976	980	981	982	978	980	979	979	981	982	979	981	978	980	978	981	978	978	980	981	979	983	975	983	979	978	979	981		
JMHE	U002	983	980	979	975	946	899	899	881	881	879	860	858	861	862	859	860	860	858	986	980	977	982	979	979	978	979	978	981	980	981	982	980	979	981	980	980	977	979	978	978	981	983	976	980	979	977	980	977	
JMJG	U001	568	567	556	510	492	500	534	535	535	537	596	673	668	672	670	675	673	671	670	672	672	667	652	659	657	640	649	649	648	648	648	648	649	677	672	674	670	672	672	672	675	671	670	673	668	672	668	669	
JMJG	U002	580	576	568	508	500	500	538	536	541	541	596	669	672	670	673	675	674	674	670	673	672	667	657	660	656	648	651	648	647	647	647	647	643	673	676	672	673	672	673	678	671	673	669	678	673	667	675	673	
JMJG	U003	570	570	570	520	500	500	535	535	535	535	600	650	650	670	670	670	670	670	670	670	670	670	670	670	670	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	
JMJG	U004	721	781	836	891	945	975	973	965	968	967	914	862	861	860	862	862	864	924	977	977	976	975	973	972	970	972	972	973	971	971	971	971	973	974	973	972	975	973	970	971	972	970	970	971	972	975	970	972	
JMJG	U005	920	904	887	884	887	889	892	892	887	890	859	860	859	862	862	862	870	895	892	892	894	891	892	892	892	890	892	892	892	892	892	892	891	896	891	892	891	888	890	891	892	892	892	890	892	890	892		
PKLG	U003	279	280	278	279	250	208	152	153	155	155	156	155	156	154	156	154	230	240	269	281	278	282	279	278	278	278	278	277	277	276	278	279	278	280	281	279	278	211	277	217	196	209	265	272	278	278	279		
PKLG	U004	276	280	279	278	199	206	140	154	155	156	159	156	158	155	158	156	155	230	240	268	276	277	275	276	277	278	274	277	278	276	277	279	277	278	278	276	277	276	279	279	276	278	278	277	278	277	277		
PKLG	U005	464	467	467	462	406	355	357	358	359	358	359	358	359	360	357	359	357	423	408	459	468	469	466	462	466	464	463	471	467	464	464	464	468	466	468	467	466	469	468	464	466	469	469	471	466	466	464	468	
PKLG	U006	445	441	442	442	440	354	284	238	176	137	99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TBIN	U001	690	685	690	686	648	661	690	642	568	527	530	501	447	449	450	450	481	652	666	685	687	688	683	689	688	689	688	683	687	687	687	687	687	690	684	689	689	686	686	686	686	686	686	686	686	686	686	686	
TBIN	U002	690	690	694	691	653	660	690	645	573	530	527	500	450	453	453	485	660	680	692	691	690	690	691	690	690	690	691	691	691	691	691	691	691	690	692	689	689	689	689	689	689	689	689	689	689	689	689		
TBIN	U003	692	691	692	694	654	669	690	650	572	527	534	501	450	451	452	451	459	658	668	690	694	691	691	689	692	692	695	691	693	693	693	693	693	692	691	692	692	692	692	692	692	692	692	692	692	692	692		
TBIN	U004	981	983	979	984	933	919	904	883	883	882	861	863	863	863	863	863	862	942	983	985	983	983	983	983	981	982	983	982	983	981	985	982	982	982	983	983	984	984	983	984	981	982	982	983	985	982	983		
Total ST-Coal		112311	12661	12781	11621	107861	105841	105581	103351	10057	9892	9899	9847	9702	9729	9726	9745	9808	10807	11110	11281	113051	113031	112571	112791	112541	112241	112291	112321	112371	112271	112361	112371	112221	113311	113181	113181	113111	113121	112421	113151	112501	112311	112231	113121	113001	113081	113041	11311	
Total ST-Oil		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total ST-Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CBPS	BLK2	295	228	221	215	220	216	222	225	224	222	223	228	222	222	219	219	212	221	217	317	359	360	360	358	360	360	360	360	360	352	352	353	361	355	357	351	349	332	237	347	359	359	366	360	359	361	363	360	362
GLGR	GT01	68	67	66	67	67	69	66	66	68	68	69	68	68	67	67	66	66	66	66	66	67	67	66	66	66	66	67	67	65	65	65	66	66	65	66	66	65	65	65	66	64	66	65	66	67	66	66	67	
GLGR	GT02	68	68	68	69	69	68	68	68	68	68	69	68	67	68	68	69	68	69	69	69	69	68	69	69	68	69	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	69	69	69	69	68
GLGR	ST1C	72	72	72	71	72	71	71	72	72	72	72	72	72	71	71	71	71	71	71	71	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	
KLPP	GT13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	133	132	133	123	139	139	108	108	107	111	108	140	132	117	109	109	108	118	113	128
KLPP	GT14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	101	134	153	154	113	111	111	127	117	157	157	124	117	118	117	122	117	0	
KLPP	GT15	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	140	140	140	140	140	123	123	123	123	148	148	148	110	110	110	0	0	0			
KLPP	ST17	67	68	67	67	67	68	67	69	68	69	68	69	68	68	67	67	67	67	67	67	68	69	68	67	67	68	67	147	144	213	206	213	213	191	191	191	185	199	215	212	201	200	200	199	145	134	66		
NPRI	BLK1	518	374	325	323	327	329	331	329	334	335	332	331	338	424	374	334	497	505	517	509	511	515	516	515	509	514	512	515	507	510	502	514	512	514	508	500	503	506	515	506	507	522	516	520	515	522	520	520	
NPRI	BLK2	508	449	329	327	330	334	334	333	340	338	335	336	387	446	334	333	499	508	520	512	514	508	518	518	512	515	515	519	510	512	503	517	515	517	511	502	485	472	518	500	500	520	518	521	517	525	523	522	
PCGP	PGRG	600	603	395	263	438	260	262	262	268	267	263	263	271	270	263	261	261	262	262	396	594	601	602	602	592	602	598	601	592	594	585	602	600	603	596	582	587												

Daily MW Generation on Thursday

		Unit	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300																									
Total CCGT-Gas			4331	3972	3576	3231	3420	3249	3105	3086	3115	3111	3093	3099	3175	3307	3135	3087	3413	3406	3475	3566	3919	4034	4156	4322	4347	4136	4268	4508	4786	5061	5340	5400	5432	5442	5291	5023	4544	4251	4682	5135	5149	5121	5070	5051	4978	4922	4804	4611	
SRDG	GT05		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	121	123	123	125	124	124	124	125	124	124	123	124	124	124	124	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total OCGT-Gas			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	121	123	123	125	124	124	124	125	124	124	123	124	124	124	124	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BSIA	HY01		21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	22	22	21	22	21	22	22	21	22	21	21	21	21	22	22	22	22	21	21	21	21	21	21	11	11	22	22	22		
BSIA	HY02		22	23	23	23	23	23	23	23	23	12	12	23	23	11	11	23	23	23	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	11	11	23	23	23		
BSIA	HY03		23	0	0	0	0	0	0	0	0	0	0	0	11	11	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	12	11	23	22	22			
CEND	HY01		9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
CEND	HY02		9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
CEND	HY03		9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
CEND	HY04		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7		
HTRG	HY01		0	0	0	0	0	0	63	63	63	63	62	63	63	63	63	63	62	124	125	125	125	125	125	125	125	125	125	125	0	0	0	0	0	62	62	63	125	125	125	125	125	125	125	125	125	124	124		
KNRG	HY01		0	0	0	0	0	0	0	22	22	0	0	0	0	0	0	0	0	0	22	35	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	21	21	21	21	21	34	21	21	21	21	21			
KNRG	HY02		36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	24	24	24	24	24	25	34	24	24	25	24	24			
KNRG	HY03		35	36	36	36	36	36	36	36	36	22	22	22	22	36	36	36	22	21	21	22	21	35	34	34	34	34	34	34	34	34	34	34	34	34	20	20	20	21	20	21	22	34	21	21	22	21	21		
KNYR	HY01		99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	56	98	99	99	99	99	99	99	99	99	99	99	99	99	99	99	97	99	99	99	99	99	99	99	99	99	99	99	99	99		
KNYR	HY02		98	101	100	100	101	99	102	99	100	99	101	101	99	98	98	98	98	96	98	100	99	99	99	100	100	99	99	99	99	98	97	101	100	99	99	96	97	98	102	99	99	102	101	101	100	102	102	101	
KNYR	HY03		98	100	99	100	99	100	99	99	99	99	99	99	98	58	58	96	98	99	98	99	98	99	99	100	100	99	99	98	98	97	99	99	99	99	96	97	98	99	98	99	99	99	99	99	99	99	99		
KNYR	HY04		99	100	100	100	100	100	100	100	100	100	100	100	99	99	97	99	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	97	98	99	100	100	100	100	100	100	100	100	100	100		
LPIA	HY01		17	17	16	16	16	16	16	17	17	17	17	17	17	17	17	18	18	18	18	19	19	19	19	19	19	18	18	18	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17		
LPIA	HY02		17	17	16	16	16	16	16	16	16	16	16	16	16	16	17	17	18	18	18	18	18	18	18	18	18	18	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17		
MNOR	HY01		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
PGAU	HY01		-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PGAU	HY03		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	19	0	0	0	0	20	19	19	0	0	0	0				
PGAU	HY04		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SIHY	HY01		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SIHY	HY02		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SIHY	HY03		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SYPS	HY01		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	0	0	0	25	25	25	25	25	25	0	0	0	0	
SYPS	HY02		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	0	0	0	25	25	25	25	25	25	0	0	0	0	
SYPS	HY04		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TMGR	HY01		-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	33	34	33	34	34	80	80	80	81	81	81	80	80	80	80	80	80	80	81	-1	-1	32	32	80	80	80	80	80	81	31	31	-1
TMGR	HY02		33	34	33	33	33	33	34	33	33	34	34	34	87	85	85	44	60	42	51	43	44	44	55	44	44	44	46	55	44	44	40	45	46	44	44	41	42	42	44	43	44	85	66	62	42	85	44	63	
TMGR	HY03		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	81	82	81	81	81	81	81	82	81	81	81	80	81	81	81	30	27	28	29	30	79	81	81	55	40	81	43	62		
TMGR	HY04		-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	33	32	82	82	82	82	82	82	82	82	82	82	82	82	81	81	81	81	81	81	81	81	81	81	81	81	81	81	31	31		
UJLI	HY01		-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
UJLI	HY02		-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
UPIA	HY01		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5																														

Daily MW Generation on Thursday

Station	Unit	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
JSL5	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	11	12	19	29	27	33	44	42	40	46	50	44	48	42	39	35	16	25	12	10	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0