Internet Of Things

Lab - 2

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Aim :

To Display the earthquake alerts with the help of Node-RED and concepts of IoT.

Software :

Node-Red Software.

Methodology :

This video instructions are followed : https://www.youtube.com/watch?v=uvN6dqNUpU8

Simulation And Output :

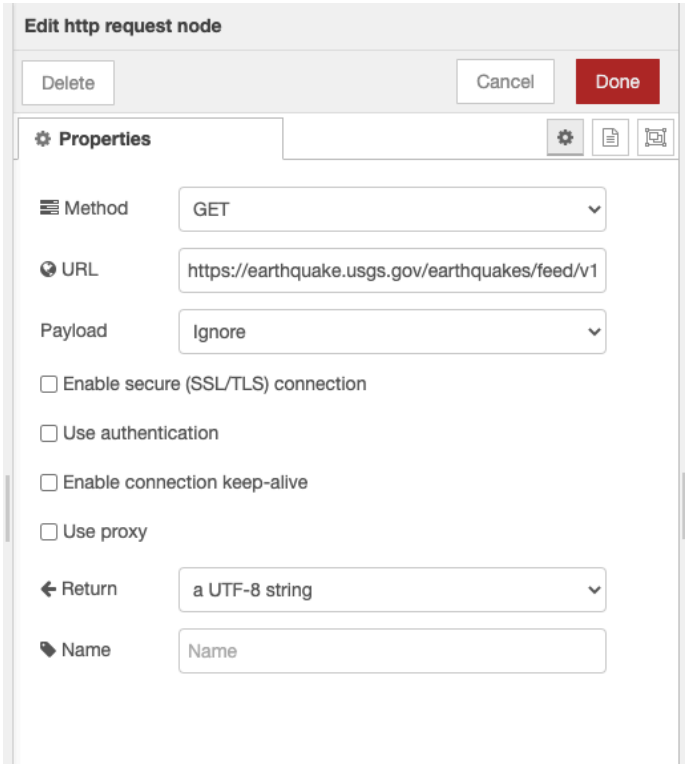
1) The Dataset used :

significant_month

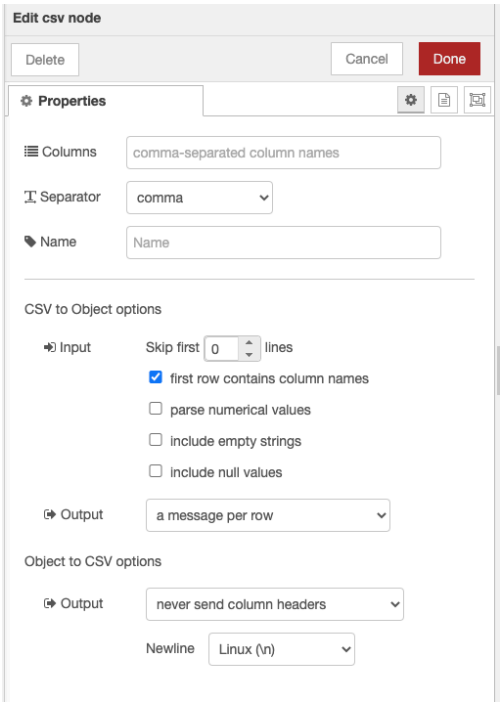
time	latitude	longitude	depth	mag	magType	nst	gap	dmin	rms	net	id	updated	place	type	horizontalError	depthError	magError	magNst	status	locationSource	magSource
2020-07-22T20:07:19.540Z	33.1313	86.8397	10	6.3	mww		15	5.155	0.96	us	us6000b2fj	2020-07-23T20:41:49.040Z	western Xizang	earthquake	7.9	1.8	0.052	35	reviewed	us	us
2020-07-22T06:12:44.593Z	55.0298	-158.5217	28	7.8	mww		64	0.647	1.27	us	us7000asvb	2020-07-24T00:03:06.231Z	105 km SSE of Perryville, Alaska	earthquake	2.3	1.8	0.04	60	reviewed	us	us
2020-07-17T05:40:36.322Z	-20.2353	-70.1399	73.82	5.9	mww		32	0.635	1.22	us	us7000aq5p	2020-07-22T23:36:50.107Z	2 km SSE of Iquique, Chile	earthquake	4	4.3	0.093	11	reviewed	us	us
2020-07-17T02:50:23.017Z	-7.8428	147.7656	79.79	7	mww		18	1.663	1.14	us	us7000aq3e	2020-07-23T16:27:42.279Z	114 km NNW of Popondetta, Papua New Guinea	earthquake	6.7	3.4	0.054	33	reviewed	us	us
2020-07-06T22:54:47.897Z	-5.5956	110.6952	538.73	6.7	mww		14	1.466	1.29	us	us7000aj3w	2020-07-13T02:05:52.482Z	98 km N of Batang, Indonesia	earthquake	7.3	3	0.052	36	reviewed	us	us
2020-07-03T20:49:45.110Z	17.8995	-67.0048	3	5.3	mwp	24	232	0.0803	0.53	pr	pr2020185017	2020-07-19T15:59:59.366Z	9 km SSE of La Parguera, Puerto Rico	earthquake	1.26	0.98	0.32	21	reviewed	pr	pr
2020-07-03T09:20:01.540Z	19.3258333333333	-155.115333333333	7.02	4.64	ml	62	144		0.11	hv	hv72027572	2020-07-08T00:40:01.857Z	15 km S of Fern Forest, Hawaii	earthquake	0.23	0.28	0.154611125803525	33	reviewed	hv	hv
2020-06-25T21:05:18.155Z	35.5948	82.4158	10	6.3	mww		24	6.134	0.63	us	us7000abmk	2020-07-19T04:30:51.557Z	278 km SE of Hotan, China	earthquake	7	1.7	0.062	25	reviewed	us	us
2020-06-25T05:20:59.627Z	44.3989	-115.1814	7.54	4.6	mwr		75	0.34	0.64	us	us7000aanf	2020-07-19T16:20:39.917Z	27 km NW of Stanley, Idaho	earthquake	2.6	4.7	0.028	119	reviewed	us	us
2020-06-24T19:47:44.889Z	35.4661	141.1005	28.88	5.9	mww		37	0.661	0.95	us	us7000aabt	2020-07-04T17:45:02.689Z	38 km SE of Hasaki, Japan	earthquake	5.9	2.9	0.05	39	reviewed	us	us
2020-06-24T17:40:49.240Z	36.4468333	-117.9751667	4.66	5.8	mw	48	67	0.08494	0.19	ci	ci39493944	2020-07-22T17:51:00.488Z	18km SSE of Lone Pine, CA	earthquake	0.18	0.66		6	reviewed	ci	ci

2) The Node-Red Processing and Output :

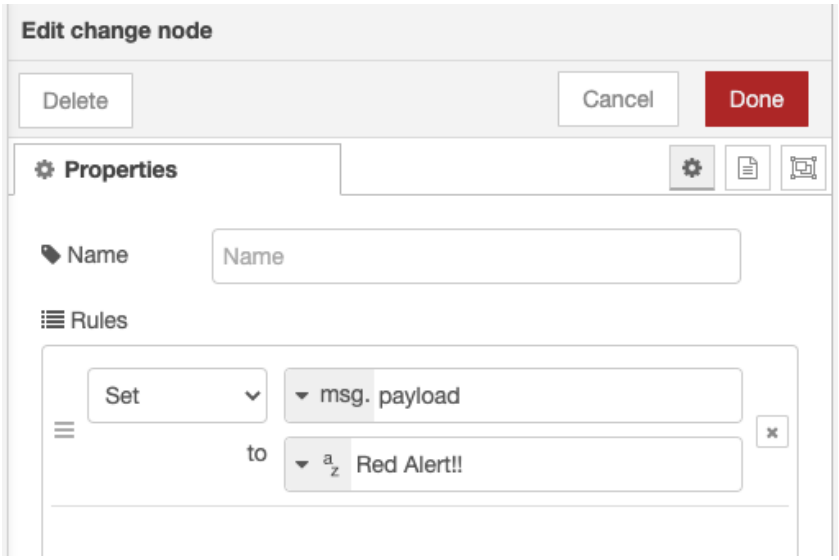
A. HTTP Request Node :



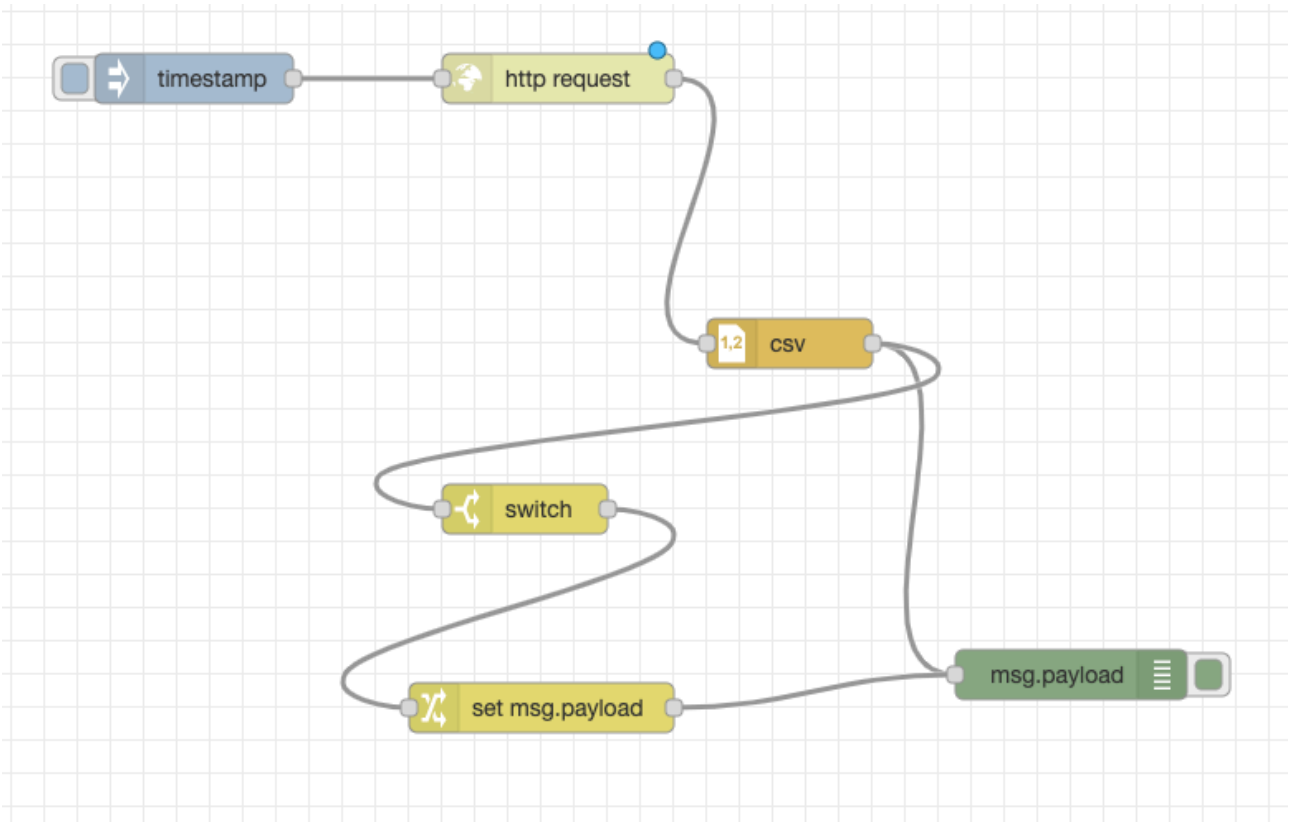
B. Edit CSV Node :



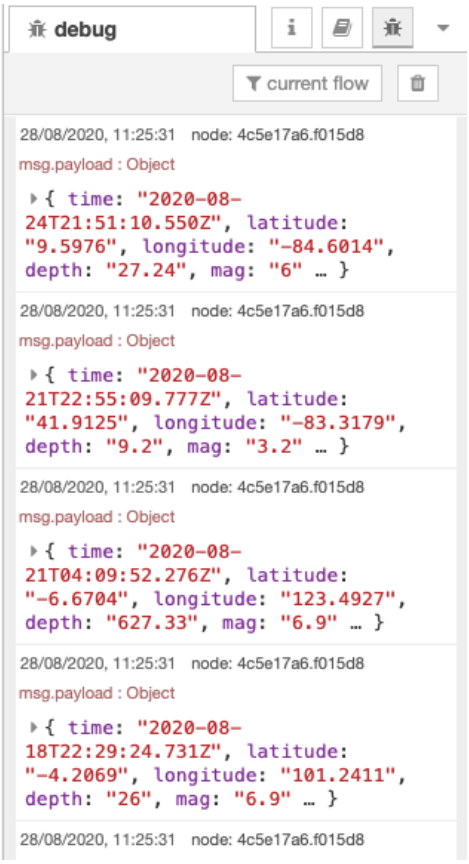
C. Message Change Node :



Circuit :



Output :



Result :

Thus, with the help of Node-RED we have taken an input data from an external source and processed and analysed it using Node Red and putting it to practical use.