

**EOSC 211: Steps in Problem Solving****Name 1:****Name 2:**

GOAL: practice the steps in problem solving using earthquake data.

**A. Write down the 3 steps in algorithm design mentioned in the text book OR write down some steps you think will be common to problem solving with MATLAB (you might have more than 3 steps):**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**We want to find the largest earthquake in the Pacific Northwest region in the past year. The data sheet gives all earthquakes in this area that have a magnitude of at least 4.0.**

**B. Fill in the following table**

	Describe in words	Give value
input		
output		

**C. Below, document the procedure you went through to get to your answer for the value of the output above.**

**HINT: you need to think about what your brain actually does when it finds the largest # in a list**

---



---



---



---



---

**D. In the following code snippet circle and identify**

- a. Variable names**
- b. Operators**
- c. Reserved words**
- d. Special characters**

```
mag1 =4.9;  
mag2 =5.3;  
if (mag1 > mag2)  
    max_mag= mag1;  
else  
    max_mag = mag2;  
end
```

**Earthquakes Canada Online Bulletin - 20170830.0000 20180831.2242**

Date	Time(UT)	Lat	Lon	Depth	Mag	Region and Comment
2018/08/21	13:10:05	50.656	-130.475	10.0g	4.9Mw	215 km W of Pt. Hardy
2018/08/01	04:13:48	50.252	-130.228	10.0g	4.5Mw	205 km W of Pt. Hardy
2018/07/02	04:08:13	51.242	-130.827	10.0g	4.0Mw	212 km WSW of Bella Bella
2018/07/02	04:08:13	51.278	-130.762	10.0g	4.0Mw	206 km WSW of Bella Bella
2018/07/02	04:08:13	51.278	-130.762	10.0g	4.1Mw	206 km WSW of Bella Bella
2018/05/10	06:36:15	48.663	-129.387	10.0g	4.0Mw	259 km W of Tofino
2018/04/24	17:41:16	50.503	-130.153	10.0g	4.3Mw	194 km W of Pt. Hardy
2018/04/03	04:21:13	49.016	-129.374	10.0g	4.4Mw	234 km SW of Pt. Hardy
2018/03/16	02:56:23	48.984	-129.655	10.0g	4.6Mw	249 km SW of Pt. Hardy
2018/03/16	02:56:23	48.984	-129.655	10.0g	4.0Mw	249 km SW of Pt. Hardy
2018/03/06	09:38:24	49.521	-127.586	10.0g	4.1Mw	108 km W of Gold R.
2018/03/01	18:35:34	50.555	-130.386	10.0g	4.6Mw	210 km W of Pt. Hardy
2018/01/28	08:52:01	51.113	-130.495	10.0g	4.1Mw	200 km WSW of Bella Bella
2018/01/23	10:39:19	48.815	-129.336	10.0g	4.4Mw	251 km SW of Pt. Hardy
2018/01/15	05:38:43	50.516	-130.121	10.0g	4.0Mw	192 km W of Pt. Hardy
2018/01/14	21:41:24	50.433	-130.282	10.0g	4.3Mw	204 km W of Pt. Hardy
2018/01/14	20:36:08	50.472	-130.265	10.0g	4.0Mw	202 km W of Pt. Hardy
2018/01/14	20:25:35	50.444	-130.257	10.0g	4.5Mw	202 km W of Pt. Hardy
2018/01/14	19:10:52	50.500	-130.270	10.0g	4.7Mw	202 km W of Pt. Hardy
2018/01/14	18:54:01	50.504	-130.288	10.0g	4.8Mw	204 km W of Pt. Hardy
2018/01/10	18:40:07	50.732	-130.534	10.0g	4.5Mw	219 km W of Pt. Hardy
2018/01/10	18:40:07	50.732	-130.534	10.0g	4.0Mw	219 km W of Pt. Hardy
2017/12/17	04:11:08	50.049	-130.073	10.0g	4.7Mw	201 km WSW of Pt. Hardy
2017/12/17	04:11:08	50.049	-130.073	10.0g	4.0Mw	201 km WSW of Pt. Hardy
2017/12/05	22:14:14	51.368	-130.758	10.0g	4.4Mw	201 km WSW of Bella Bella
2017/12/04	03:51:41	50.424	-130.314	10.0g	4.5Mw	207 km W of Pt. Hardy
2017/11/21	09:47:05	49.157	-130.015	10.0g	4.9Mw	253 km WSW of Pt. Hardy
2017/11/21	09:47:05	49.157	-130.015	10.0g	4.3Mw	253 km WSW of Pt. Hardy
2017/11/13	18:37:28	49.206	-129.898	10.0g	4.5Mw	243 km WSW of Pt. Hardy
2017/11/13	18:37:28	49.206	-129.898	10.0g	4.0Mw	243 km WSW of Pt. Hardy
2017/10/11	09:26:05	48.163	-128.280	10.0g	4.5Mw	205 km WSW of Tofino
2017/09/28	07:48:02	50.643	-130.519	10.0g	4.4Mw	218 km W of Pt. Hardy

<http://www.earthquakescanada.nrcan.gc.ca/>