## **Tutorial Function Week of Oct 31 to Nov 4**

Albert Einstein is infamous because of his many theories and inventions. Having said that, his equation stating the relationships between energy, mass and velocity is most commonly represented as:  $E = mc^2$ , where c represents the speed of light. In a way,  $c^2$  is the factor required to make E = m. **E is expressed in Joules when mass is measured in Kg. and c in m/s**.

Your mission is to right a short program to compute **E**, with these specifications:

- 1. The mass will be an input to your program, and c is a constant (C = 299,792,458 m/s)
- 2. The function **compute\_e** does the computation of e = mc<sup>2</sup>
- 3. The function **convert\_speed\_2\_m** translates the speed of light from kilometres per second to metres per second
- 4. The function **my\_printer** is in charge of printing results (no printing happens anywhere else). Please print **E** in scientific notation.
- 5. Your **main** program will *orchestrate* everything

Note: the speed of light squared is: 8.98755179 x 10<sup>16</sup> m<sup>2</sup>/s<sup>2</sup>