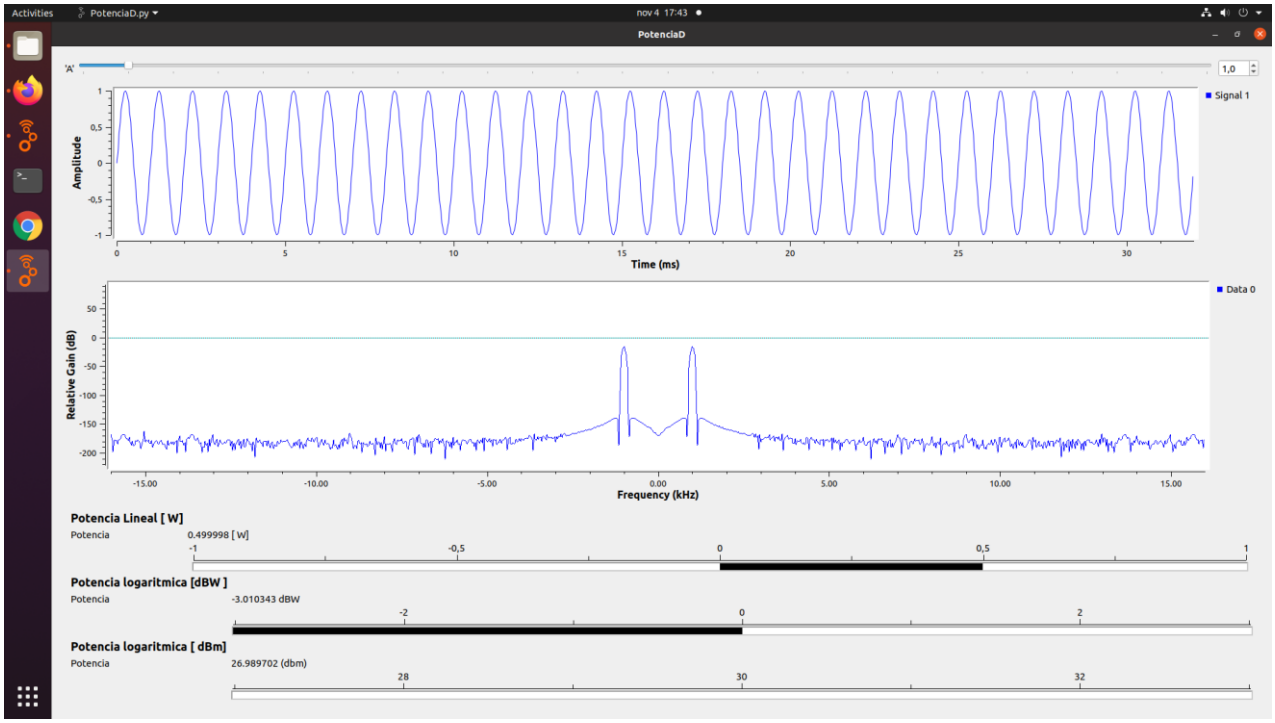
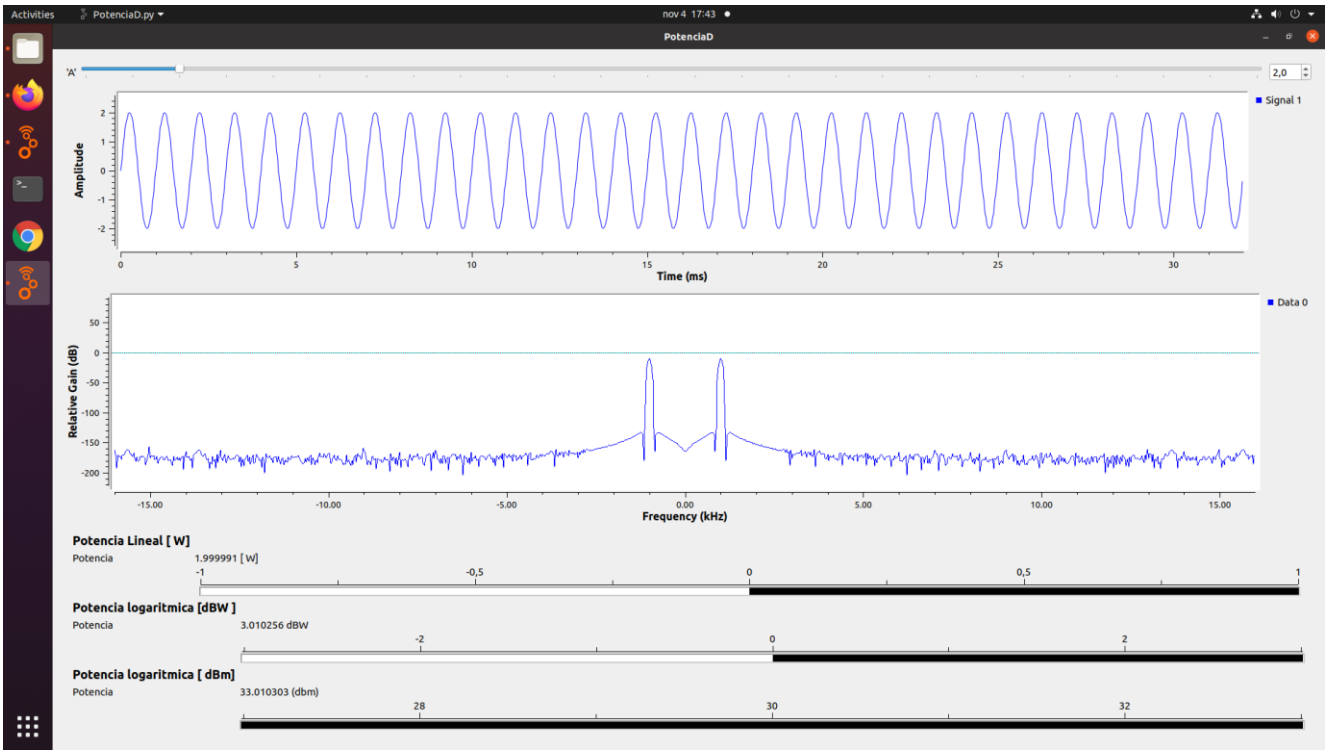
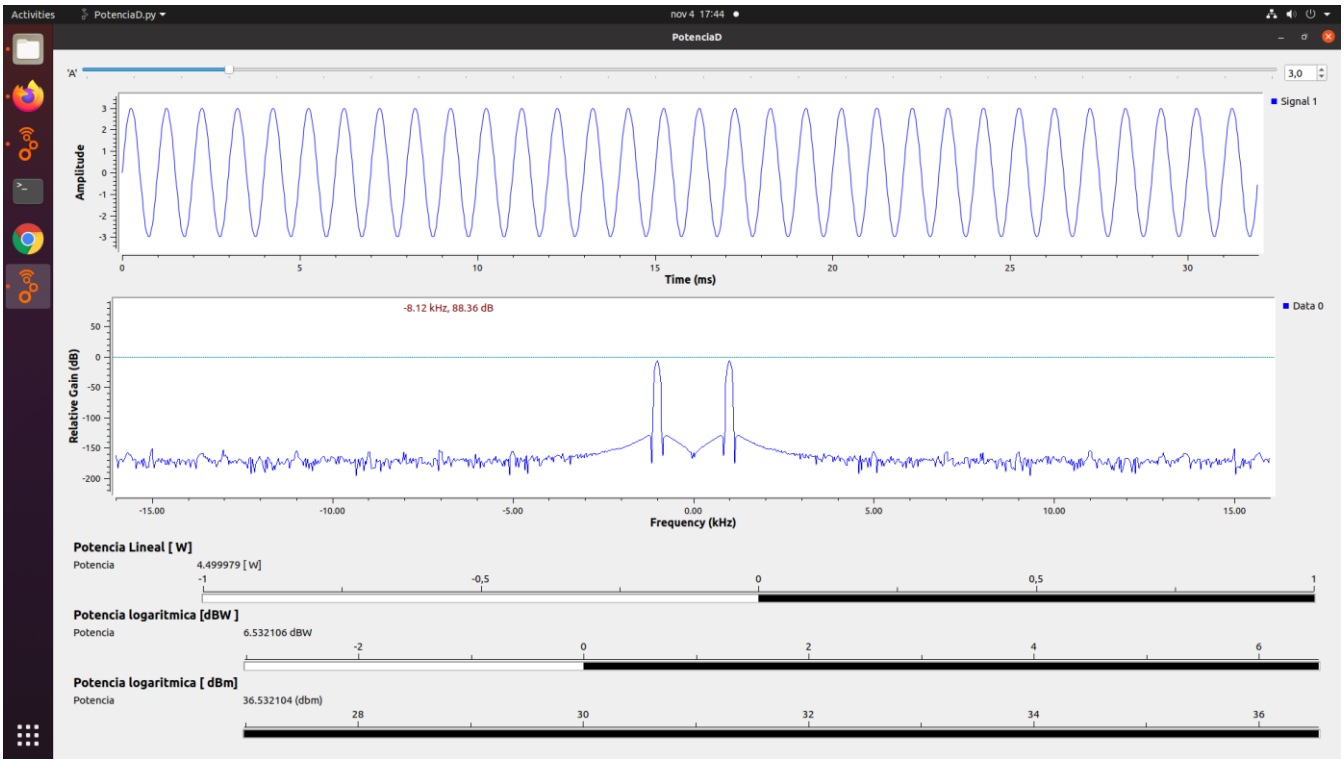
1) Potencia del sen(wot) para varias amplitudes:



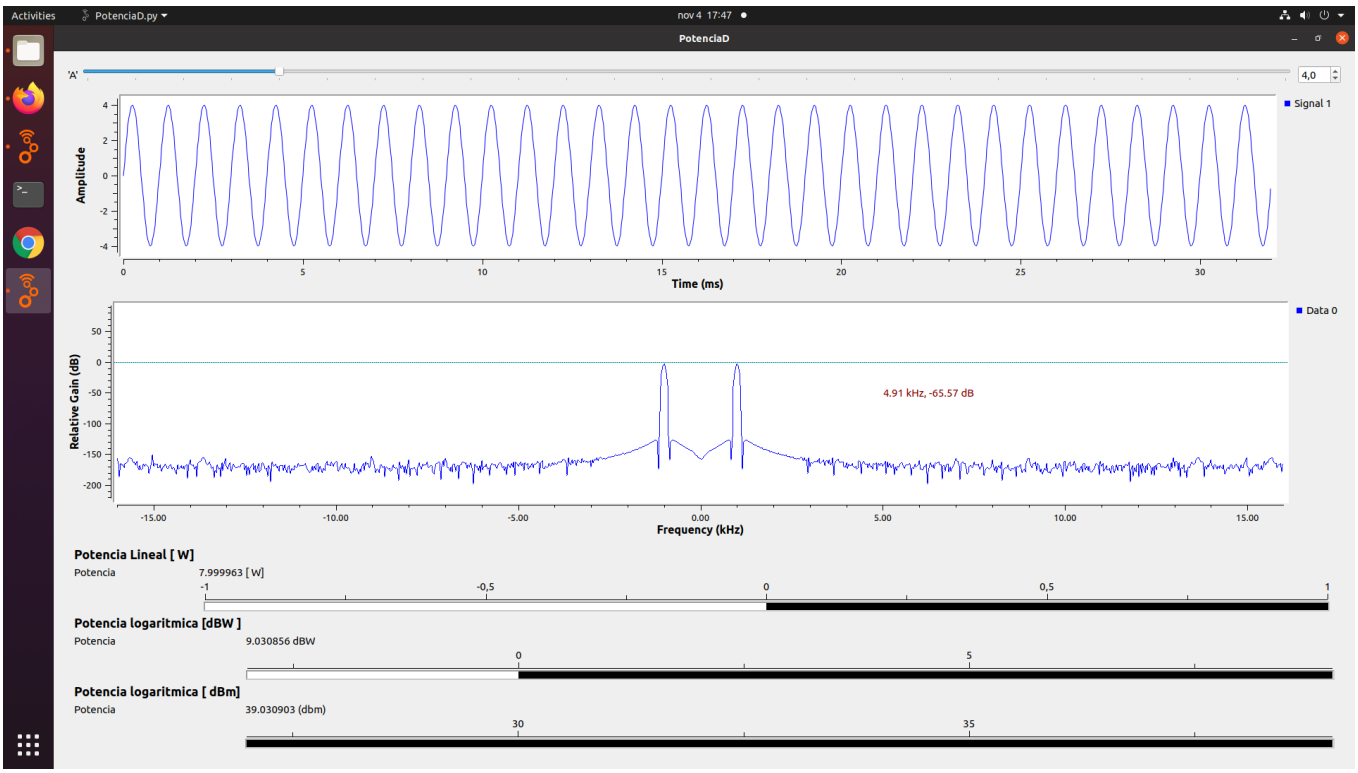
$$P = 1000 * \int_0^{\frac{1}{1000}} |Sen(2000\pi t)|^2 dt = \frac{1}{2}[W]$$



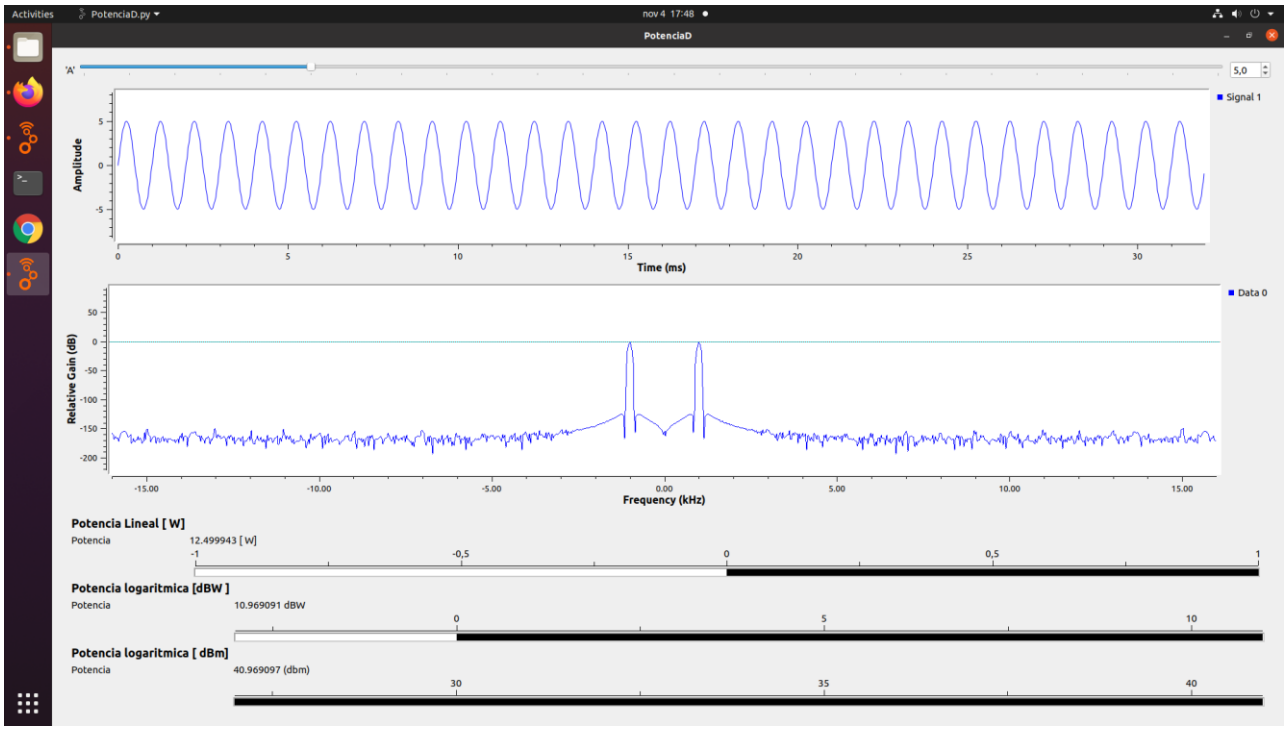
$$P = 1000 * \int_0^{\frac{1}{1000}} |2 * Sen(2000\pi t)|^2 dt = 2[W]$$



$$P = 1000 * \int_0^{\frac{1}{1000}} |3 * Sen(2000\pi t)|^2 dt = 4.5[W]$$



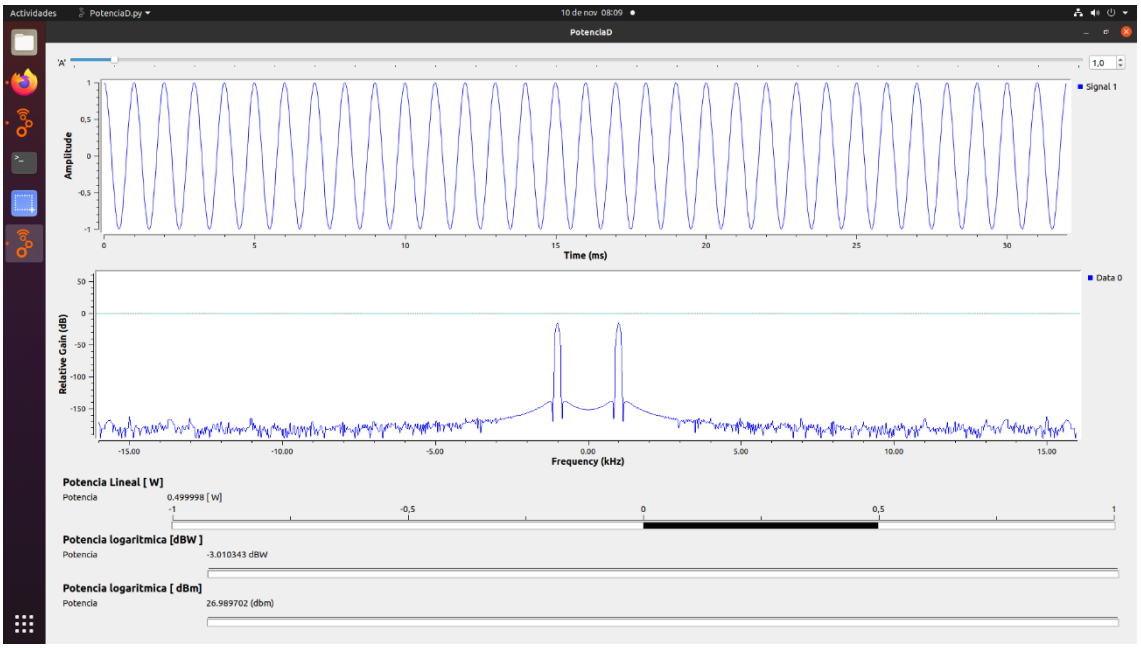
$$P = 1000 * \int_0^{\frac{1}{1000}} |4 * Sen(2000\pi t)|^2 dt = 8[W]$$



$$P = 1000 * \int_0^{\frac{1}{1000}} |5 * Sen(2000\pi t)|^2 dt = 12.5[W]$$

2) Potencias de diferentes señales

Cos(wot):

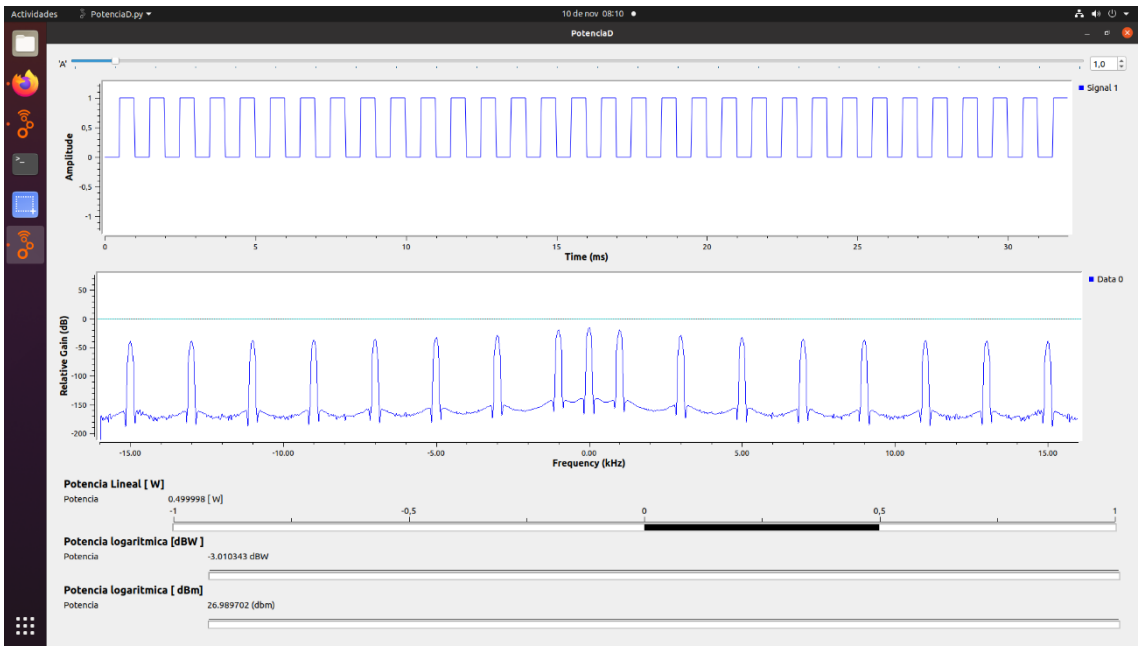


$$P = 1000 * \int_0^{\frac{1}{1000}} |1 * Cos(2000\pi t)|^2 dt = 0.5[W]$$

$$P = 1000 * \int_0^{\frac{1}{1000}} |2 * Cos(2000\pi t)|^2 dt = 2[W]$$

$$P = 1000 * \int_0^{\frac{1}{1000}} |3 * Cos(2000\pi t)|^2 dt = 4.5[W]$$

Onda cuadrada:

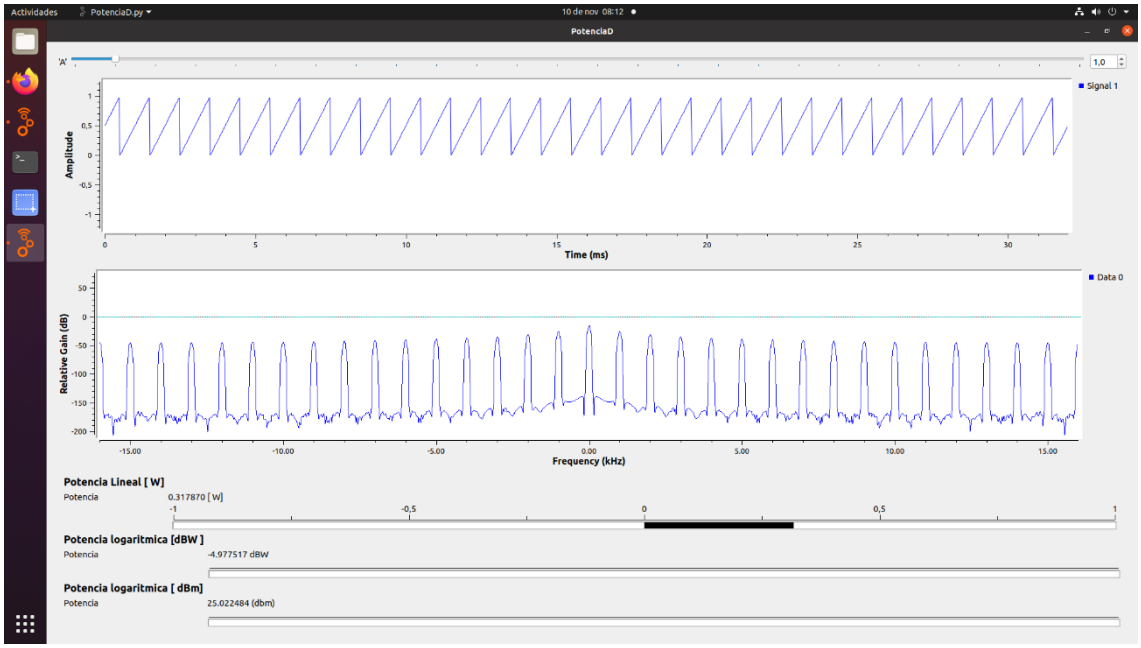


$$P = 1000 * \int_0^{\frac{1}{1000*2}} |1|^2 dt = 0.2[W]$$

$$P = 1000 * \int_0^{\frac{1}{1000*2}} |2|^2 dt = 2[W]$$

$$P = 1000 * \int_0^{\frac{1}{1000*2}} |3|^2 dt = 4.5[W]$$

Diente de sierra:



$$P = 1000 * \int_0^{\frac{1}{1000}} |1 * (1000)t|^2 dt = 0.33[W]$$

$$P = 1000 * \int_0^{\frac{1}{1000}} |2 * (1000)t|^2 dt = 1.33[W]$$

$$P = 1000 * \int_0^{\frac{1}{1000}} |3 * (1000)t|^2 dt = 3[W]$$