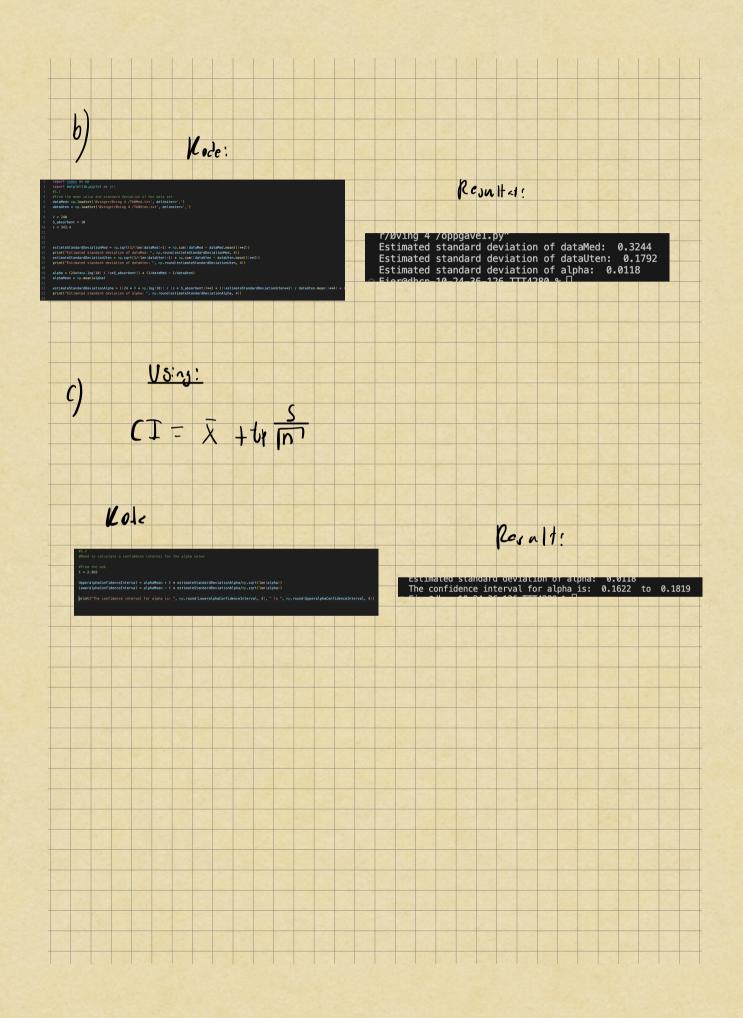
Quing 4 - Akoutikk og teil forplanting: Offger 1) Cabuarbant = CSabsarban (Toomer Toomer) 9 Oα ≈ OThermed (∂α) 2 + OTherman (∂α) 2

∂Thermed (∂Thermed) 2 d - - 74 V [n (10) (1) (To, res<sup>2</sup>)

2 d - 24 V [n (10) (1) (1)

2 d - 24 V [n (10) (1) (To, res<sup>2</sup>)

2 d - (Sabsorbort (To, ute, 2) Ox 2 = (24 ln (6)) 2 ( OT 6, when They med



Task 2) y = Kx / N militar av x og y.

A liz tra

Ulapp  $S(u) = \sum_{i=1}^{n} (y_i - ux_i)^2$  $\frac{15(4)}{44} = 0 = \frac{1}{2} - 2xi(y; -4xi) = -2 = xi(y; -4xi)$ K = \( \frac{1}{2} \) \( \frac{1} \) \( \frac{1} \) \( \frac{1}{2} \) \( \frac{1}{2}

Task 3) korigains as austone! d=y-X antar! x= xsen + & , &~ N(0, 0x) y = 9 scan + n , ~ ~ N(0,0x) a) Md = Mp - Mx = Ysonn + n - (xxn, + &) = dsong + (n - }) Siden N = & Si for vi Ild = docum  $\sigma_{4}^{2} = \sigma_{x}^{2} \left(\frac{\partial J}{\partial x}\right)^{2} + \sigma_{y}^{2} \left(\frac{\partial J}{\partial y}\right)^{2}$ b)  $= \pi^{2}(-1) + \xi^{2}(1)^{2}$   $= \pi^{2} + \xi^{2} = 20x$ 01 - 20 0x2

d = (Yscan - Xscan + Ox) C) $O_{3}^{2} = O_{\times}^{2} \left( \frac{\partial J}{\partial \times} \right)^{2} + O_{\times}^{2} \left( \frac{\partial J}{\partial y} \right)^{2}$ = 0x (2 (yson - x son + 0x)) + 0x (2 (yson - x son + 0x)) + 0y (2 (yson - x son + 0x))  $=20x^2$ 01-120 12 - (yi - Xi)2 = (yson - xson + Ox)2 12 = (43mn - xsam)2 + 2 + {4sinn - xsam)n Ms2 = M(4sam-xsam)2+M(n2)+M(2h(4sam-xsam)) MJ<sup>2</sup> - (Ysan - xsan)<sup>2</sup> + MZ<sup>2</sup> + 2 (Ysan - xsan)Mh

