## Code1

## September 10, 2023

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[1]: #prevalence
     population = int(input("Population: "))
     existingcases = int(input("Existing Cases: "))
     prevalence = existingcases / population
     print(prevalence)
     print(prevalence * 100000)
    Population: 1780000
    Existing Cases: 99
    5.5617977528089886e-05
    5.561797752808989
[3]: #incidence
     newcases = int(input("New cases: "))
     incidence = newcases/population
     print(incidence)
     print(incidence*100000)
    New cases: 19
    1.0674157303370787e-05
    1.0674157303370786
[5]: #mortality rate
     dead = int(input("Number of those who died: "))
     segment = int(input("Number of those who had the disease: "))
     mortalityrate = dead/segment
     print(mortalityrate)
     print(mortalityrate*100000)
    Number of those who died: 2
    Number of those who had the disease: 99
    0.020202020202020204
    2020.2020202020203
[7]: #years of potential life lost
     lifeexpectancy = 77
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ages = [64,74]
      print(lifeexpectancy - ages[0])
      print(lifeexpectancy - ages[1])
     13
     3
[13]: lifelost = [13,3]
      ypp1 = sum(lifelost)/len(lifelost)
      print(ypp1)
     8.0
[24]: #Part2
      #prevalence
      population = int(input("Population: "))
      existingcases = int(input("Existing Cases: "))
      prevalence = existingcases / population
      print(prevalence)
      print(prevalence * 100000)
     Population: 2660000
     Existing Cases: 1459
     0.0005484962406015038
     54.849624060150376
 [3]: #incidence
      newcases = int(input("New cases: "))
      incidence = newcases/population
      print(incidence)
      print(incidence*100000)
     New cases: 248
     9.323308270676691e-05
     9.32330827067669
 [5]: #mortality rate
      dead = int(input("Number of those who died: "))
      segment = int(input("Number of those who had the disease: "))
      mortalityrate = dead/segment
      print(mortalityrate)
      print(mortalityrate*100000)
     Number of those who died: 1
     Number of those who had the disease: 1459
     0.0006854009595613434
     68.54009595613434
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[26]: #Part3
      #prevalence
      population = int(input("Population: "))
      existingcases = int(input("Existing Cases: "))
      prevalence = existingcases / population
      print(prevalence)
      print(prevalence * 100000)
     Population: 100000
     Existing Cases: 3000
     0.03
     3000.0
[18]: #incidence
      newcases = int(input("New cases: "))
      incidence = newcases/population
      print(incidence)
      print(incidence*100000)
     New cases: 2500
     0.025
     2500.0
[20]: #mortality rate
      dead = int(input("Number of those who died: "))
      segment = int(input("Number of those who had the disease: "))
      mortalityrate = dead/segment
      print(mortalityrate)
      print(mortalityrate*100000)
     Number of those who died: 40
     Number of those who had the disease: 3000
     0.0133333333333333334
     1333.333333333335
[22]: #Part4
      #prevalence
      population = int(input("Population: "))
      existingcases = int(input("Existing Cases: "))
      prevalence = existingcases / population
      print(prevalence)
      print(prevalence * 100000)
     Population: 1780000
```

Existing Cases: 15000

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0.008426966292134831
842.6966292134831
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[28]: #incidence
      newcases = int(input("New cases: "))
      incidence = newcases/population
      print(incidence)
      print(incidence*100000)
     New cases: 3000
     0.03
     3000.0
[30]: #mortality rate
      dead = int(input("Number of those who died: "))
      segment = int(input("Number of those who had the disease: "))
      mortalityrate = dead/segment
      print(mortalityrate)
      print(mortalityrate*100000)
     Number of those who died: 5
     Number of those who had the disease: 15000
     0.00033333333333333333
     33.33333333333336
[32]: #years of potential life lost
      lifeexpectancy = 77
      ages = [32,45,28,37]
     print(lifeexpectancy - ages[0])
      print(lifeexpectancy - ages[1])
     45
     32
 []:
```