Mid Term Examination

CS 513

KDD

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**Solution of Q8:**

1. Estimate the number of cases
2. USA:

Population: 331 Million

Cases per Million: 381.24

Total Number of Cases in USA = 331\*381.24

= **1,26,190.44**

1. Italy:

Population: 60 Million

Cases per Million: 1463.97

Total Number of Cases in Italy = 60\*1463.97

= **87,838.2**

1. Spain:

Population: 47 Million

Cases per Million: 1590.24

Total Number of Cases in Italy = 47\*1590.24

= **74,741.28**

1. Given the person is living in USA what is the probability of being infected

P (Infected / Living = USA) = 1,26,190.44 / 331 Million

= **0.00038**

1. Given the person is infected what is the probability of being in USA

P (USA / Infected = Y) = 1,26,190.44 / (1,26,190.44 + 87,838.2 + 74,741.28)

= 1,26,190.44 / 2,88,769.92

= **0.4369**