Task 1 : Week 1:
A short summary about the conductive heat transfer and solving the same exercise with L= 0.4 m, A= 20 m2, Delta T= 25, and k=0.78 W/m K using both simple method and using the resistance concept

A short summary is the conduction is the amount of heat energy goes through any forms of materials like liquid , gas , or solid like wall and this amount is related to material , area , thinness of it at the same time it is completely related to the difference of the temperature at both side of it . wall as an example have all of those items and thinker wall is good for hot weather and at same time smaller the area of the wall less energy conduction happen .

L:0.4 m , A=20 m2 , Delta T =25 , K=0.78 w/mk

1- Q=KA deltaT /L = 0.78*20*25/0.4=975 W

2- R_{wall} =L/KA=0.4/(0.78*20) = 0.0256 C/W

Q=deltaT/R_{wall} =25/0.0256 = 976.5625 =~~ 977 W rounding to higher