ASSIGNMENT 4

Probability and Statistics

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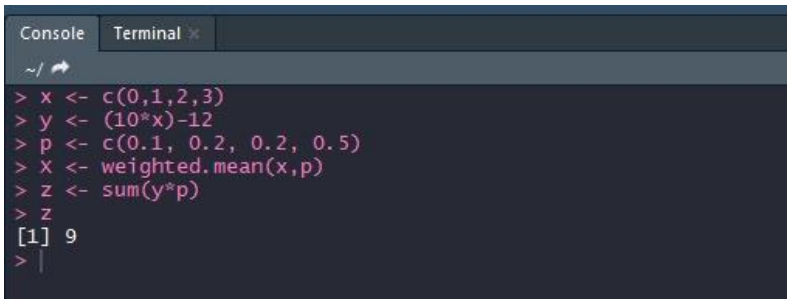
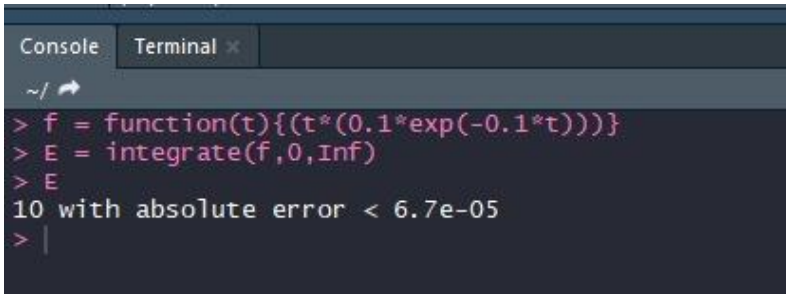
COE11

Outputs :

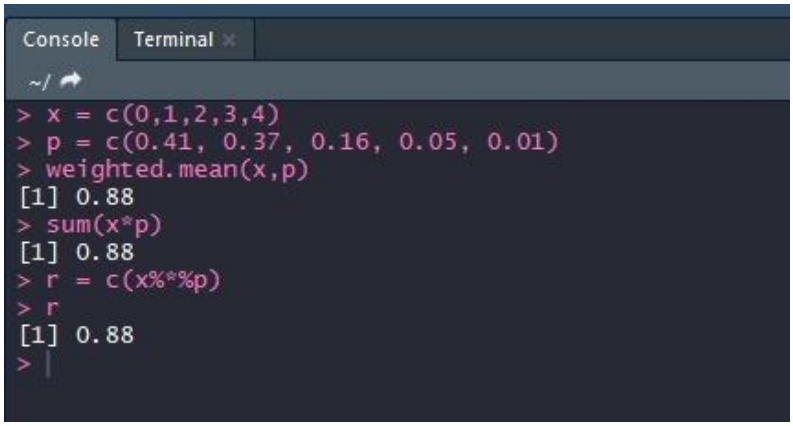
Q1



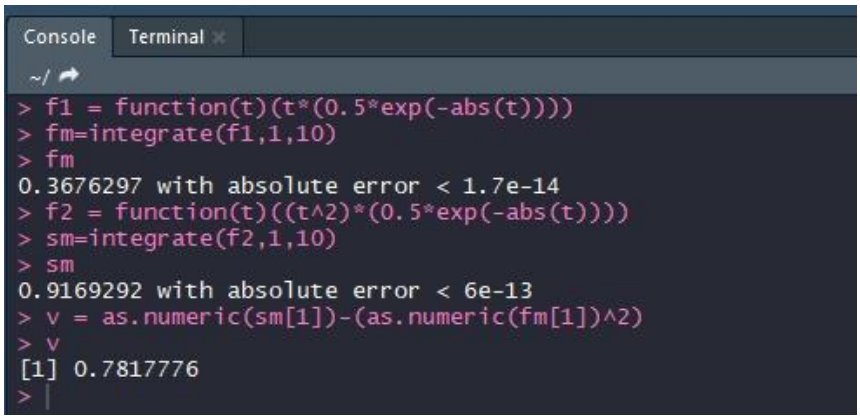
Q2



Q3



Q4


Console
Terminal
~/
> f1 = function(t)(t*(0.5*exp(-abs(t))))
> fm=integrate(f1,1,10)
> fm
0.3676297 with absolute error < 1.7e-14
> f2 = function(t)((t^2)*(0.5*exp(-abs(t))))
> sm=integrate(f2,1,10)
> sm
0.9169292 with absolute error < 6e-13
> v = as.numeric(sm[1])-(as.numeric(fm[1])^2)
> v
[1] 0.7817776
>